



# **Environmental Functional Area**

**Environmental Support and Programmatic Outreach Group**

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LLNL-AR-411431-13-3

## **LLNL Experimental Test Site, Site 300 Compliance Monitoring Report for Waste Discharge Requirement (WDR) Order No. R5-2008-0148**

**Annual/Second Semester Report  
2012**

*Author*

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**Lawrence Livermore  
National Laboratory**

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Forms



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## Certification

I certify that the work presented in this report was performed under my supervision. To the best of my knowledge, the data contained herein are true and accurate, and the work was performed in accordance with professional standards.



Richard G. Blake 2/7/13

Richard G. Blake  
California Professional Geologist  
No. 5550  
License expires: July 31, 2014

Date

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### **List of Abbreviations and Acronyms**

3CMP	samples collected at Site 300 for Compliance Monitoring Program
3EMG	samples collected at Site 300 for the Permits and Regulatory Affairs Division
3GIV	samples collected at Site 300 for site investigations
3VES	three casing volumes purged using an electric submersible pump
BCLABS-BAK	BC Laboratories, Inc. in Bakersfield, CA
BOD	biochemical oxygen demand
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CMP	Compliance Monitoring Program (conducted under CERCLA)
CMR	Compliance Monitoring Report (prepared under CERCLA)
CoC	chain-of-custody form
CVRWQCB	Central Valley Regional Water Quality Control Board
DO	dissolved oxygen
DSWP	sewage percolation pond influent sampling location
DTW	depth to (ground) water
EC	electrical conductivity, or specific conductance (SC)
EFA	Environmental Functional Area
ESWP	sampling location within sewage evaporation pond
GF	Grundfos pump
FRUITGROWL	FGL Environmental Laboratories in Stockton, CA
ft	feet
gal	gallons
gpm	gallons per minute (measurement of flow)
GWE	ground water elevation (above mean sea level)
HSU	hydrostratigraphic unit
ID	identification number
ISWP	sewage evaporation pond influent sampling location
LLNL	Lawrence Livermore National Laboratory
MCL	maximum contaminant level (for drinking water)
mL	milliliters

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**List of Abbreviations and Acronyms (Continued)**

MPN	most probable number
MRP	monitoring and reporting program
mV	millivolts (measure of oxidation-reduction potential)
NA	not applicable
ND	none detected, or not detected
NO <sub>3</sub>	nitrate
NR	analysis not required by Permit at this sampling location
pH	measure of the acidity or alkalinity of a solution
OG	off gassing measured by scale of 1-5, 5 being high amounts of off gassing
OU	Operable Unit under CERCLA
Q	flow rate, or number of well volumes purged (according to context)
Qal	Quaternary Age alluvial deposits
QC	quality control
Qt	Quaternary Age terrace deposits
RHWM	Radioactive and Hazardous Waste Management
SC	specific conductance, or electrical conductivity (same as EC)
SHO	short analytical holding time (such as samples for coliform bacteria analyses)
VOA	samples collected for analysis of volatile organic compounds
WDR	waste discharge requirements (Permit)

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## **Executive Summary**

Under authority of the State of California, and required by the Porter-Cologne Water Quality Control Act, the Central Valley Regional Water Quality Control Board (CVRWQCB) issued Order No. R5-2008-0148 for the Experimental Test Site (Site 300), to Lawrence Livermore National Laboratory (LLNL). Monitoring and Reporting Program (MRP) Number R5-2008-0148 was adopted in September 2008, and revised effective December 1, 2009. The revised MRP terms and conditions have been implemented in this report. Under the terms of this MRP, LLNL submits semiannual and annual monitoring reports detailing its Site 300 discharges of domestic and wastewater effluent to the sewage evaporation pond and percolation pond in the General Services Area, and cooling tower blow down to percolation pits and septic systems, and mechanical equipment discharges to percolation pits located throughout the site.

This annual report contains all the elements required by Waste Discharge Requirement (WDR) Order R5-2008-0148 for the first and second semesters of 2012 and updates the status of equipment and facilities since the adoption of R5-2008-0148. Permit terms and conditions were met for all permitted networks. Compliance certification accompanies this report, as required by the permit.

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## 1. Introduction

Site 300, operated by Lawrence Livermore National Security, LLC, is located in the Altamont Hills approximately 10.5 kilometers (6.5 miles) southwest of downtown Tracy, California. Required monitoring for specific Lawrence Livermore National Laboratory (LLNL) Site 300 monitoring networks is defined in the Monitoring and Reporting Program (MRP) Order Number R5-2008-0148, which was adopted in September 2008, and revised effective December 1, 2009. The revised MRP has been implemented in this report. Applicable reporting requirements are found in the Standard Provisions and Reporting Requirements specified in the Waste Discharge Requirements (WDR) Order R5-2008-0148 (CVRWQCB, 2008) permit and in the MRP R5-2008-0148.

This report provides a summary of monitoring in designated networks conducted during the first and second semesters of 2012 under the revised MRP R5-2008-0148 (CVRWQCB, 2008). The report details the monitoring results of the three compliance networks and presents analytical data, field summary sheets, and inspection logs associated with discharges at the networks.

Compliance monitoring networks discussed in the report include:

- Sewage evaporation and percolation ponds wastewater and ground water monitoring (Sections 2.1 through 2.5).
- Cooling tower blow down discharge monitoring and percolation pit inspections (Sections 3.1 through 3.4).
- Mechanical equipment effluent discharge monitoring and percolation pit inspections (Sections 4.1 through 4.4).
- Permit related summaries and updates.

BC Laboratories, Inc., Alpha Labs, and FGL Environmental Laboratory provided off-site analytical support for the monitoring networks.

This second semester/annual report summarizes the 2012 activities associated with these monitoring networks including: tabular summaries or data plots for all data for at least the last five years; ground water elevation contour map with well locations; identification of any data gaps or deficiencies; and a discussion of any changes to the monitoring program.

**Figure 1** shows the locations of the wastewater systems permitted under WDR R5-2008-0148, including mechanical equipment percolation pits and the sewage oxidation and percolation ponds (sewage ponds) located in the General Services Area. None of the permitted mechanical equipment percolation pits overflowed during this monitoring period, and only a minor amount of standing water was observed within the Cristy boxes. There were no detected impacts to ground water around the sewage ponds. Discharges from cooling towers and mechanical equipment were consistent with historic information provided in the previous Reports of Waste Discharge.



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## 2. Sewage Evaporation and Percolation Ponds

### 2.1. Effluent and Pond Compliance Monitoring Program

MRP R5-2008-0148 requires semi-annual samples be collected of wastewater flowing into the sewage evaporation pond (sewage pond) for analysis. Sample collection is by grab sampling from a location west of the sewage pond (see sampling location ISWP in **Appendix A, Figure A-1** showing the Site 300 sewage evaporation and percolation ponds and ground water and wastewater compliance monitoring locations). Location ISWP is a port in a pipe that captures all waste streams before they flow into the sewage pond. The samples are analyzed for specific conductance (SC, or electrical conductivity), pH, and biochemical oxygen demand (BOD).

MRP R5-2008-0148 also requires samples be collected of wastewater within the sewage pond and wastewater discharging into the sewage percolation pond. Semiannual wastewater samples are collected by grab sampling from a dock at the eastern end of the sewage pond (sampling location ESWP) and analyzed for SC, pH, metals, dissolved oxygen (DO), BOD, and total and fecal coliform. Any discharge from the sewage pond to the sewage percolation pond (sampling location DSWP) is grab sampled and analyzed for the same constituents. Permit WDR R5-2008-0148 requires LLNL to operate the sewage pond with adequate freeboard to minimize the frequency of discharges to the sewage percolation pond.

Observations of the sewage pond are made and recorded at least monthly for freeboard, color, odor, and levee condition. **Appendix A** contains several 2012 data sets including; field tracking forms, sewer pond inspection reports, ground water sampling data forms, historical data plots for the sewage evaporation pond and percolation pond network, and ground water well field observation forms for the sewage pond. Inspection reports indicate some animal burrows are observed in the levee from time to time. These burrows continue to be monitored by operations personnel to ensure that the integrity of the levee is not compromised.

Leak detection and monitoring compliance at the sewage evaporation and percolation ponds is accomplished by monitoring the shallow ground water beneath and adjacent to the ponds. Ground water monitoring includes semiannual sampling during the first and second semesters when ground water levels are the highest and lowest and analysis of the collected samples for SC, pH, total and fecal coliform, chloride, nitrate, sulfate, total dissolved solids, sodium, and metals. In addition, ground water elevations are routinely recorded and contoured (**Appendix A, Figure A-2**). A map showing the locations of the monitor wells (**Appendix A, Figure A-1**) with respect to the ponds, and tables of ground water specifications and elevations for the first and second semesters of 2012 for each well are provided (**Appendix A, Tables A-1 and A-2**).

In addition to normal operation of the sewer evaporation pond, discharges to the sewer pond occurred that were associated with the beneficial use of discharged water. These discharges were in preparation for potable water delivery to Site 300 from the San Francisco Public Utility District Hetch Hetchy water system. The Hetch-Hetchy water is flushed from the line periodically to maintain sanitary conditions in the line. When a discharge is scheduled the chlorinated water is analyzed for chlorine, and when the water reaches a chlorine residual value at or below 1.0 mg/L, it generally takes one or two weeks to prepare for the flush. When

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flushing, a 4-inch hose is used to pump the water from the Hetch-Hetchy line to the sewer evaporation pond. Before the water is flushed, the residual chlorine concentration is adjusted and generally decreases to 1 mg/L or less; pH is also adjusted at this time. During the second semester 2012, three discharges associated with the pipeline flushing were reused as evaporation loss makeup water to the sewage pond. Details of these discharges are shown on **Table 1** below which provides the dates that discharges occurred, the volume of water discharged, chlorine residual, and pH of the discharged water. These discharges are consistent with Waste Discharge Requirements Order Number R5-2008-0148 and the revised MRP (November 23, 2009).

**Table 1. Summary water system pipeline flushing and pressure testing discharges at Site 300 during 2012.**

Discharge Date	Volume Discharged (gallons)	Chlorine Residual (mg/L)	pH (units)	Reuse
4/25/2012	30,000	.02	8.74	Evaporation makeup water in sewage pond
5/16/2012	30,000	.04	8.51	Evaporation makeup water in sewage pond
5/23/2012	30,000	.06	8.74	Evaporation makeup water in sewage pond
8/2/2012	37,700	.02	8.89	Evaporation makeup water in sewage pond.
8/23/2012	34,031	.03	8.91	Evaporation makeup water in sewage pond
11/7/2012	30,700	.04	8.02	Evaporation makeup water in sewage pond

## 2.2. Sewage Pond Wastewater Sampling and Analysis

For the sewage pond wastewater sampling and analysis, calibration is performed on DO, SC, and pH meters less than 12 hours before sampling. DO, SC, pH, and temperatures of the samples are measured and written on the field tracking forms (field logs) when the grab samples from ISWP, ESWP, and DSWP are collected. Chain-of-custody (CoC) forms are filled out appropriately and signed by the sampler for each analytical laboratory to which the samples are transferred; CoC numbers are also written on the field logs. Analytical methods used are appropriate EPA-approved Methods (U.S. Environmental Protection Agency, 2005) or Standard Methods (Clesceri et al., 1998).

The samples required under MRP R5-2008-0148 for locations ISWP and ESWP were collected on September 9, 2012. These samples, and all samples collected with results presented in this report, were collected, analyzed, and results entered into the Environmental Functional Area (EFA) database according to a complete set of written protocols documented in the LLNL Environmental Functional Area's Environmental Monitoring Plan (Gallegos, 2012).

## 2.3. Sewage Pond Wastewater Monitoring Results

Results are summarized here for samples collected during the monitoring period as required under MRP R5-2008-0148. Monitoring data are found in **Appendix A**. Coliform, anion, BOD, DO, and specific conductance data summaries are presented in **Table A-3**. A metal data summary for the locations ESWP and DSWP are found in **Table A-4**. **Table A-5** provides a duplicate (QA) sampling data summary for the sewage pond's wastewater monitoring network. All results and observations were in compliance with the Permit's discharge specifications.



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Adequate free board was provided to prevent any over-topping or erosion of the pond embankment. Field tracking forms are provided in **Appendix A**, which also contains the field logs, including field measurements. The CoCs and laboratory analytical results are stored at LLNL and are available upon request.

In addition to normal monitoring during the second semester, there was one discharge of wastewater from the sewage evaporation pond to the sewage percolation pond. This discharge occurred on July 16, 2012, when an unknown amount of treated sewage was discharged to the sewage percolation pond. The cause of the leak was due to a faulty plumber's plug in the discharge pipe outlet. The LLNL maintenance department placed sand bags at the outflow to stop the flow into the percolation pond and replaced the leaky plug. Sampling of evaporations pond treated water at the discharge point was conducted on July 17, 2012 and results are shown on **Table A-4**.

## **2.4. Ground Water Sampling and Analysis**

Semiannual sampling of ground water from wells at the sewage evaporation and percolation ponds was performed during the second semester of 2012. Ground water samples were collected and analyzed, and results entered into the EFA database according to written protocol (Goodrich and Lorega, 2009). The monitor wells were purged and sampled during two phases, from August 6-14, 2012, and November 7-15, 2012, according to prescribed methods assigned to each monitor well. Information regarding the conditions during sampling, as well as field measurements taken at the time of sampling, is found in the ground water sampling data sheets located in **Appendix A**. The collected samples were transferred to an offsite analytical laboratory for physical parameters and analyses listed in **Section 2.1**. Following the initial sampling event, each well was treated with a pre-calculated dose of chlorine and pumped to circulate the chlorine throughout the water column. On the following day, wells were tested for residual chlorine and samples collected to be analyzed for total and fecal coliform bacteria at an offsite analytical laboratory. Wells that tested positive for chlorine were pumped until chlorine was not detected prior to sampling, according to the aforementioned written protocols.

## **2.5. Ground Water Monitoring Results**

All monitored parameters were in compliance with the Permit limits; ground water data are presented in Tables found in **Appendix A**. Anion data are listed in **Table A-6**. Coliform data are found in **Table A-7**. **Table A-8** provides a summary of physical chemistry data and **Table A-9** lists metals data. QA data summaries for the monitoring network are located in **Table A-10**. During the second semester, neither total coliform or fecal coliform was detected above the <2 (MPN/100mL detection limit (**Table A-7**)).

**Appendix A, Figure A-2** contains the ground water elevation contour map for the most shallow ground water zones (Hydrostratigraphic Units [HSUs]) in the sewage evaporation and percolation ponds area. This map reflects ground water elevation levels from November 2012. The sewer pond ground water network map showing concentrations of nitrates is presented in **Appendix A, Figure A-3**. Nitrate data is also shown in **Table A-6**. All the detailed ground water data CoCs and laboratory analytical results are archived at LLNL and are available upon request.

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### 3. Cooling Tower Network

#### 3.1. Cooling Tower Compliance Monitoring Program

Monitoring required for the cooling tower blow down is specified in MRP R5-2008-0148. LLNL implemented the cooling tower blow down monitoring starting the fourth quarter of 2008. Applicable reporting requirements are found in the Standard Provisions and Reporting Requirements of WDR R5-2008-0148 and the MRP.

Cooling towers located at Site 300 discharge either into percolation pits or into septic systems. Currently, there are eight operating cooling towers. The cooling tower locations are identified in **Appendix B, Figure B-1**. The cooling tower located at Building 825 discharges to a septic system. The remaining cooling towers located at Buildings 801, 817, 826, 827, and 851 all discharge to percolation pits. The two original cooling towers located at Building 851 were replaced in the second semester 2009 with a single new cooling tower. The two cooling towers located at Building 827 have blended cooling water and a combined discharge line and therefore only one sample is routinely collected to characterize the discharge of these cooling towers.

MRP R5-2008-0148 requires semi-annual sampling of the cooling tower blow down. Grab samples are collected from the water circulating in the cooling tower, either at a valve or a drainpipe. The grab samples are collected directly into the containers specified by the laboratory. Samples are analyzed for metals, pH, sodium, SC, sulfate, total alkalinity, total dissolved solids, total hardness, and total phosphorus.

#### 3.2. Cooling Tower Blow Down Effluent Sampling and Analysis

Second semester 2012 routine cooling tower blow down samples were collected between October 10 and October 18, 2012. For the cooling tower blow down sampling and analysis, calibration is performed on SC and pH meters less than 12 hours before sampling. SC and pH data measured in the field are written down on field tracking forms. CoC forms are filled out appropriately and signed by the sampler for each analytical laboratory to which the samples are transferred; CoC numbers are also written on the field logs. Analytical methods used are appropriate EPA-approved Methods (U.S. Environmental Protection Agency, 2005) or Standard Methods (Clesceri et al., 1998).

#### 3.3. Cooling Tower Blow Down Monitoring Results

All cooling tower sample results are listed in **Appendix B** along with the Quality Assurance results, field tracking forms, and CoCs. **Table B-1** lists anion data, **Table B-2** lists metals results, and **Table B-3** provides data on the required physical characteristics. QC data from duplicate sampling is provided in **Table B-4**.

Analytical results for cooling tower blow down samples collected this semester were generally consistent with data found in WDR Order No. R5-2008-0148, Attachments 19 and 20, with the following exceptions:

- Copper concentrations in samples collected ranged from 2.3 µg/L to 77 µg/L, as compared to the concentrations summarized in the WDR attachments (5.6 µg/L to

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8.3 µg/L). Cooling tower at Building 817 (77 µg/L ) had the most elevated copper value, while all other cooling towers had values lower than last semester (**Table B-2**).

- Molybdenum concentrations in samples collected ranged from <25 µg/L to 27 µg/L, which are lower than the concentrations of data summarized in the WDR attachments (<25 µg/L to 31 µg/L). The cooling tower at Building 851 (27 µg/L) showed the highest molybdenum concentration during the second semester 2012 results.
- Zinc concentrations in samples collected ranged from <20 µg/L to 680 µg/L and were greater than the concentrations of data summarized in the WDR attachments (<20 µg/L to 44 µg/L). The cooling towers at Buildings 817 (680 µg/L) and 826 (58 µg/L) were two of the cooling towers that showed the most elevated zinc concentrations in the second semester 2012 results.

Although the concentrations for copper, molybdenum, and zinc are slightly above the range in the appendix (Attachments 19 and 20) of the WDR, the discharge concentrations are well below the values calculated using the Designated Level Methodology to impact ground water. LLNL will continue to evaluate future copper, molybdenum, and zinc analytical data.

### **3.4. Cooling Tower Percolation Pit Monthly Inspections**

Since the first semester 2010, LLNL implemented monthly visual inspections of the cooling tower percolation pits located at Buildings 801, 812, 817A, 826, 827A, and 851 (**Appendix B, Figure B-1**), which collect effluent from the cooling towers as specified in MRP R5-2008-0148.

If standing water is present, the MRP requires the inspection frequency to be increased to weekly until standing water is no longer visible. Visual inspections are conducted to verify the percolation pits are working properly and do not have the potential to overflow. Copies of the inspection forms are found in **Appendix B**. No standing water was observed and no overflows were reported during this semester.

## **4. Mechanical Equipment Effluent Monitoring**

### **4.1. Mechanical Equipment Discharge Monitoring Program**

Monitoring required for mechanical equipment discharge effluent to percolation pits is specified in the MRP R5-2008-0148. During the first semester of 2010, LLNL first implemented the monitoring elements for the identified mechanical equipment systems located at Buildings 806B, 827A, 827C, 827D, and 827E. **Appendix C, Figure C-1** provides the locations of those systems.

### **4.2. Mechanical Equipment Effluent Sampling and Analysis**

The results for the mechanical equipment room effluent monitoring for the second semester of 2012 are reported in **Appendix C**. Monitoring is performed using composite sampling from Cristy boxes that allows an automatic sampler to be placed within the boxes, allowing composite samples to be collected during operations. During this sampling period, samples were taken from the Buildings 806B, 827A, 827C, and 827E locations. During this period, the mechanical equipment discharge at Building 827D was not available for sampling because the boilers were non-operational.

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For the sampling and analysis of mechanical equipment effluent, CoC forms are filled out appropriately and signed by the sampler for each analytical laboratory to which the samples are transferred; CoC numbers are also written on the field logs, provided in **Appendix C**. Analytical methods used are appropriate EPA-approved Methods (U.S. Environmental Protection Agency, 2005) or Standard Methods (Clesceri et al., 1998).

### **4.3. Mechanical Equipment Effluent Monitoring Results**

Sample analytical results for this monitoring network are presented in **Appendix C**. Results are consistent with data found in Attachments 5 and 6 in the MRP R5-2008-0148. **Table C-1** lists anion data, **Table C-2** lists metals results and **Table C-3** provides data on the required physical characteristics. Data from duplicate sampling is provided in the data tables.

### **4.4. Mechanical Equipment Percolation Pit Monthly Inspections**

MRP R5-2008-0148 requires monthly inspections of the five mechanical equipment percolation pits located at Buildings 806B, 827A, 827C, 827D, and 827E (**Appendix C, Figure C-1**). **Appendix C** contains the second semester 2012 mechanical equipment percolation pit inspection checklists. If standing water is visible during the inspection, the inspection frequency for the percolation pit with the standing water is increased to weekly until no standing water is visible. During the second semester, standing water was only observed at Building 827D from November 26 to December 17 with levels from 3 inches to 1 foot. It was determined that the standing water in the percolation pit at B-827D was caused from a faulty water softener that was releasing water to the percolation pit. Once identified, the water softener was repaired and the follow-up inspection on January 7, 2013 indicated routine operations.

## **5. Permit Related Summaries and Updates**

### **5.1. Regulatory Correspondence**

The following letters or verbal communication have been provided to the CVRWQCB during the second semester of 2012 and are summarized below.

- This semester, only routine operations occurred under the CVRWQCB permit WDR-R5-2008-0148.

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- U.S. Environmental Protection Agency (2005), *Title 40 Code of Federal Regulations, Part 136*.

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## **Acknowledgments**

The compliance-monitoring program supporting the permit WDR R5-2008-0148 is large and could not be performed without the dedicated efforts of many people. The completion of this report, and the groundwork laid for future report submissions, would not have been possible without the invaluable and timely technical contributions of Allen Grayson, Don MacQueen, John Valett, John Radyk, Suzie Chamberlain, and Dawn Chase.

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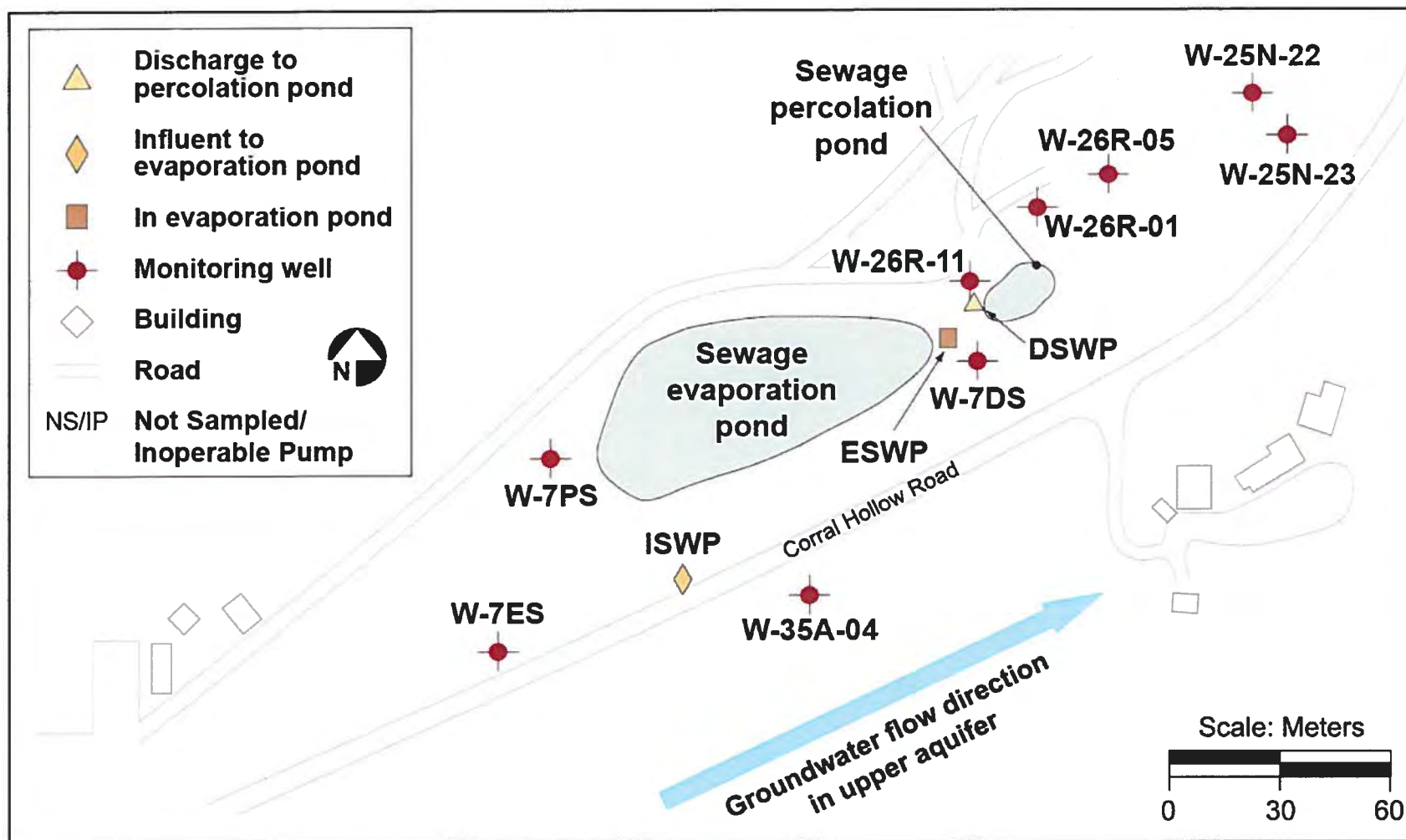
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## **Appendix A**

### **Sewage Evaporation and Percolation Pond Network**



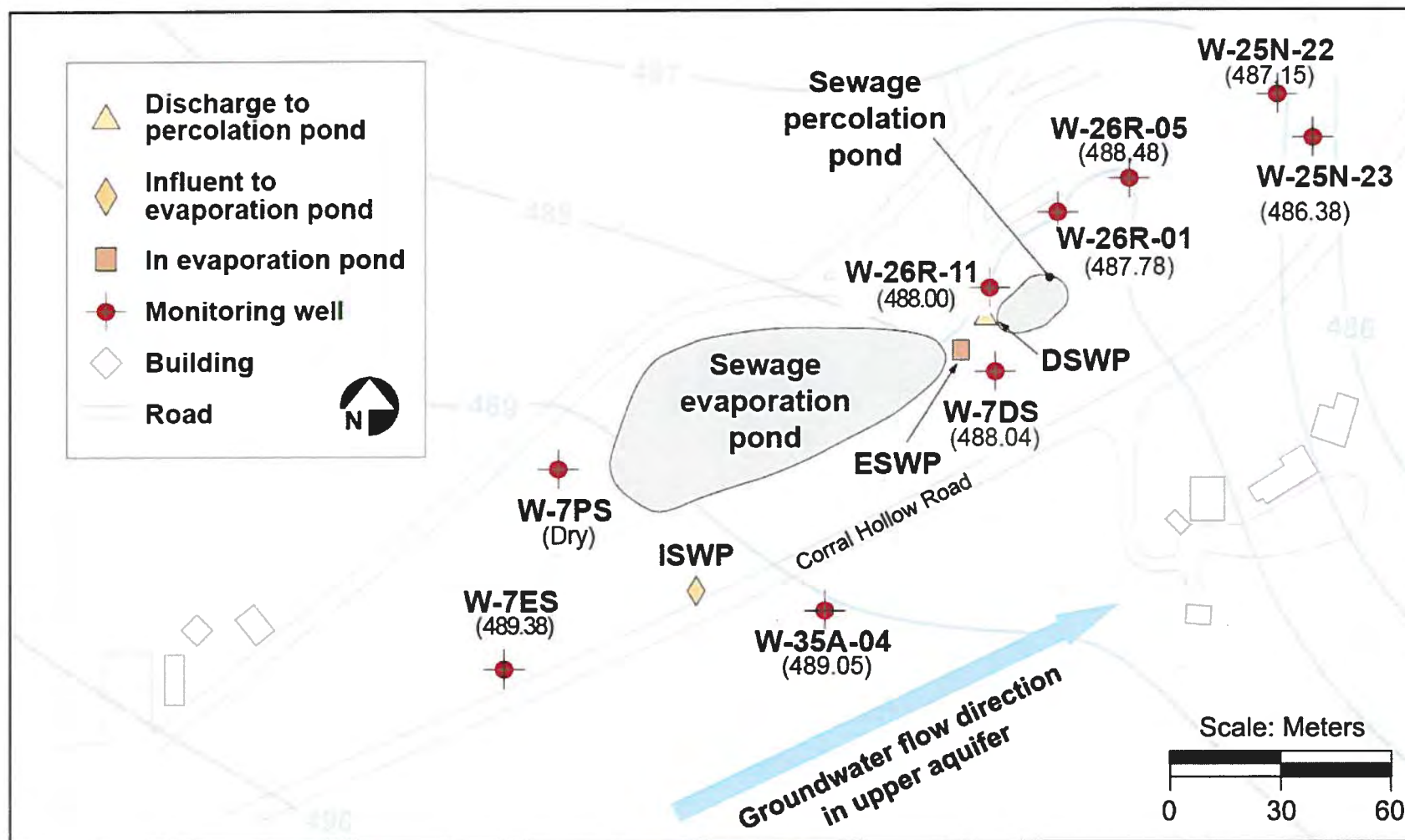
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ERD-S3R-13-002

**Figure A-1. Sewer pond wastewater and ground water monitoring network.**

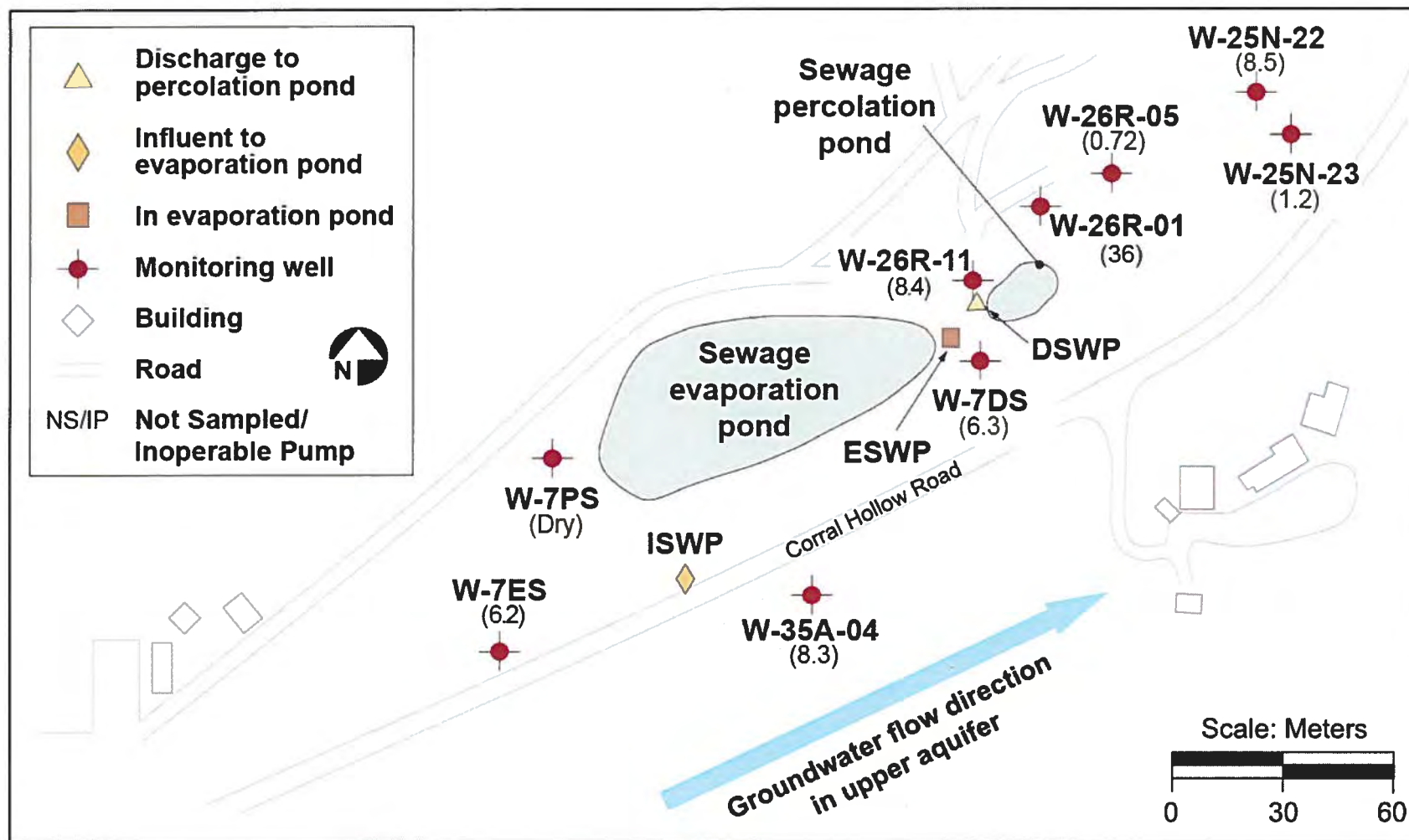
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ERD-S3R-13-0021

**Figure A-2. Site 300 sewer pond wastewater and effluent monitoring network with ground water elevations (ft above mean sea level).**

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ERD-S3R-13-0023

**Figure A-3. Site 300 sewer pond wastewater and effluent monitoring network with nitrate concentration (in mg/L).**

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**Table A-1. Summary of Site 300 sewer pond well specifications.**

<b>Well</b>	<b>HSU</b>	<b>Easting</b>	<b>Northing</b>	<b>Ground surface elevation</b>	<b>Measuring point elevation</b>	<b>Screen top elevation</b>	<b>Screen bottom elevation</b>	<b>Bentonite top elevation</b>	<b>Filter pack top elevation</b>	<b>Well bottom elevation</b>
W-7ES	Qal- Tnbs <sub>1</sub>	1,711,719	414,586	506.41	509.71	491.41	481.41	496.41	495.41	479.61
W-7PS	Qal- Tnbs <sub>1</sub>	1,711,773	414,782	506.10	508.78	489.60	486.60	494.10	492.10	486.60
W-35A-04	Qal- Tnbs <sub>1</sub>	1,712,036	414,642	504.07	503.98	485.07	475.07	494.87	486.27	475.07
W-26R-01	Qal- Tnbs <sub>1</sub>	1,712,267	415,036	506.74	509.71	486.94	481.94	494.24	490.74	476.94
W-26R-11	Qal- Tnbs <sub>1</sub>	1,712,198	414,961	504.93	507.21	489.13	479.13	493.13	491.13	477.93
W-26R-05	Qal- Tnbs <sub>1</sub>	1,712,339	415,070	511.31	513.11	491.11	486.11	500.81	498.81	485.81
W-25N-20	Qal- Tnbs <sub>1</sub>	1,712,371	414,923	502.11	504.94	490.11	475.11	494.61	492.61	474.11
W-7DS	Qal- Tnbs <sub>1</sub>	1,712,206	414,880	503.30	506.60	487.80	477.80	491.80	489.80	476.30
W-25N-22	Qal- Tnbs <sub>1</sub>	1,712,486	415,152	510.25	513.06	492.25	482.25	497.25	495.25	481.75
W-25N-23	Qal- Tnbs <sub>1</sub>	1,712,521	415,109	507.58	510.39	488.58	473.58	495.08	493.08	472.28

**Notes:**

All measurements are made in feet; elevations are in feet above mean sea level.

HSU = Hydrostratigraphic unit.

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**Table A 2. Site 300 sewer pond ground water monitoring network 2012 ground water elevation summary.**

<b>Well</b>	<b>Date sampled</b>	<b>Pre-sampling measurement</b>	<b>Ground water depth (ft.)</b>	<b>Ground water elevation (ft. above MSL)</b>
	Jan 25	PS	17.7	492.0
W-7ES	Jan 26	PS	17.6	492.1
W-7ES	Feb 29	–	18.2	491.5
W-7ES	May 8	PS	18.6	491.1
W-7ES	May 9	PS	18.7	491.0
W-7ES	May 15	–	18.8	490.9
W-7ES	Aug 8	PS	19.5	490.2
W-7ES	Aug 9	PS	19.7	490.0
W-7ES	Aug 22	–	18.9	490.8
W-7ES	Nov 7	–	20.3	489.4
W-7ES	Nov 13	PS	20.4	489.3
W-7ES	Nov 14	PS	20.4	489.3
W-7PS	Jan 25	PS	17.2	491.6
W-7PS	Jan 26	PS	17.2	491.6
W-7PS	Feb 29	–	DRY	DRY
W-7PS	May 7	PS	18.2	490.6
W-7PS	May 8	PS	18.2	490.6
W-7PS	May 15	–	DRY	DRY
W-7PS	Aug 22	–	DRY	DRY
W-7PS	Nov 7	–	DRY	DRY
W-35A-04	Jan 30	PS	11.6	492.5
W-35A-04	Jan 31	PS	11.6	492.5
W-35A-04	Feb 29	–	11.6	492.5
W-35A-04	May 8	PS	13.9	490.2
W-35A-04	May 9	PS	13.9	490.2
W-35A-04	May 16	–	11.9	492.1
W-35A-04	Jun 6	PS	14.3	489.8
W-35A-04	Jun 7	PS	14.3	489.8
W-35A-04	Jun 13	PS	14.3	489.7
W-35A-04	Jun 14	PS	14.4	489.7
W-35A-04	Aug 8	PS	14.8	489.3
W-35A-04	Aug 9	PS	14.8	489.3
W-35A-04	Aug 23	–	14.9	489.1
W-35A-04	Nov 12	PS	15.5	488.6
W-35A-04	Nov 13	PS	15.4	488.6
W-35A-04	Dec 11	–	15.0	489.1
W-25N-23	Jan 30	PS	21.4	488.7
W-25N-23	Jan 31	PS	21.5	488.6
W-25N-23	Feb 29	–	21.9	488.1
W-25N-23	May 15	–	22.6	487.5
W-25N-23	Aug 13	PS	23.4	486.7
W-25N-23	Aug 14	PS	23.4	486.7
W-25N-23	Aug 22	–	23.3	486.8
W-25N-23	Nov 7	–	23.7	486.4
W-25N-22	Jan 30	PS	23.6	489.2
W-25N-22	Jan 31	PS	23.5	489.2
W-25N-22	Feb 29	–	24.0	488.7
W-25N-22	May 15	–	24.6	488.1
W-25N-22	Aug 13	PS	25.3	487.4
W-25N-22	Aug 14	PS	25.2	487.5
W-25N-22	Aug 22	–	25.2	487.5
W-25N-22	Nov 7	–	25.6	487.2
W-26R-01	Jan 24	PS	19.4	490.3
W-26R-01	Jan 25	PS	19.4	490.3 (cont.)

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**Table A 2. Site 300 sewer pond ground water monitoring network 2012 ground water elevation summary.**

<b>Well</b>	<b>Date sampled</b>	<b>Pre-sampling measurement</b>	<b>Ground water depth (ft.)</b>	<b>Ground water elevation (ft. above MSL)</b>
W-26R-01	Feb 29	–	20.0	489.7
W-26R-01	May 7	PS	20.5	489.2
W-26R-01	May 8	PS	20.5	489.2
W-26R-01	May 15	–	20.5	489.2
W-26R-01	Aug 6	PS	21.4	488.4
W-26R-01	Aug 7	PS	21.4	488.4
W-26R-01	Aug 22	–	21.1	488.6
W-26R-01	Nov 7	–	21.9	487.8
W-26R-01	Nov 7	PS	21.7	488.1
W-26R-01	Nov 8	PS	21.4	488.3
W-26R-05	Jan 23	PS	22.8	490.3
W-26R-05	Jan 26	PS	25.5	487.6
W-26R-05	Feb 29	–	23.3	489.8
W-26R-05	May 7	PS	23.7	489.4
W-26R-05	May 10	PS	25.4	487.7
W-26R-05	May 15	–	24.4	488.7
W-26R-05	Aug 6	PS	24.4	488.7
W-26R-05	Aug 9	PS	26.2	486.9
W-26R-05	Aug 22	–	23.9	489.2
W-26R-05	Nov 7	–	24.6	488.5
W-26R-05	Nov 12	PS	24.6	488.5
W-26R-05	Nov 15	PS	26.3	486.8
W-26R-11	Jan 24	PS	16.7	490.5
W-26R-11	Jan 25	PS	16.7	490.5
W-26R-11	Feb 29	–	17.3	489.9
W-26R-11	May 7	PS	17.4	489.8
W-26R-11	May 8	PS	17.4	489.8
W-26R-11	May 15	–	17.9	489.3
W-26R-11	Aug 6	PS	13.6	493.7
W-26R-11	Aug 7	PS	18.6	488.7
W-26R-11	Aug 22	–	17.4	489.8
W-26R-11	Nov 7	–	19.2	488.0
W-26R-11	Nov 7	PS	19.2	488.0
W-26R-11	Nov 8	PS	19.2	488.0
W-7DS	Jan 23	PS	16.0	490.6
W-7DS	Jan 24	PS	16.0	490.6
W-7DS	Feb 29	–	16.6	490.0
W-7DS	May 7	PS	17.2	489.4
W-7DS	May 8	PS	17.2	489.4
W-7DS	May 15	–	17.7	488.9
W-7DS	Aug 8	PS	17.9	488.7
W-7DS	Aug 9	PS	18.0	488.6
W-7DS	Aug 22	–	17.2	489.4
W-7DS	Nov 7	–	18.6	488.0
W-7DS	Nov 7	PS	18.6	488.0
W-7DS	Nov 8	PS	18.6	488.0

Note:

– = Analysis not required.

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**Table A-3. Site 300 sewer pond wastewater monitoring network second semester/annual 2012 coliform, anion, and physical characteristic data summary.**

<b>Well</b>	<b>Date</b>	<b>pH</b>	<b>Specific Conductance (umhos/cm)</b>	<b>Biochemical Oxygen Demand (mg/L)</b>	<b>Dissolved Oxygen (mg/L)</b>	<b>Fecal Coliform (MPN/100mL)</b>	<b>Total Coliform (MPN/100mL)</b>	<b>Sodium (mg/L)</b>
3-DSWP-OW	Jul 17	9.8	4,680	210	4.0	80	230	1,100
3-ESWP-OW	Apr 24	9.7	5,120	43	14	3,000	24,000	1,200
3-ESWP-OW	Sep 25	9.9	5,100	51	24	1,700	3,000	1,200
3-ISWP-OW	Apr 24	8.3	1,450	340	–	–	–	–
3-ISWP-OW	Sep 25	8.1	1,780	600	–	–	–	–

Note:

– = Analysis not required.

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
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**Table A-4. Site 300 sewer pond wastewater monitoring network 2012 second semester/annual report metals data summary.**

<b>Analyte</b>	<b>Date</b>	<b>3-DSWP-OW</b>	<b>3-ESWP-OW</b>
Aluminum	Apr 24	–	210
	Jul 17	2,700	–
	Sep 25	–	<100
Arsenic	Apr 24	–	4.3
	Jul 17	3.4	–
	Sep 25	–	4.4
Barium	Apr 24	–	<25
	Jul 17	110	–
	Sep 25	–	<50
Boron	Apr 24	–	5,700
	Jul 17	4,500	–
	Sep 25	–	5300
Cadmium	Apr 24	–	<50
	Jul 17	<50	–
	Sep 25	–	<100
Calcium	Apr 24	–	12,000
	Jul 17	17,000	–
	Sep 25	–	13,000
Chromium	Apr 24	–	3.7
	Jul 17	19	–
	Sep 25	–	4.1
Hexavalent Chromium	Apr 24	–	<1
	Jul 17	<1	–
	Sep 25	–	<1
Copper	Apr 24	–	5.4
	Jul 17	38	–
	Sep 25	–	5.5
Iron	Apr 24	–	190
	Jul 17	5,200	–
	Sep 25	–	350
Lead	Apr 24	–	<5
	Jul 17	11	–
	Sep 25	–	<10
Magnesium	Apr 24	–	3,600
	Jul 17	4,000	–
	Sep 25	–	1,300
Manganese	Apr 24	–	48
	Jul 17	160	–
	Sep 25	–	<60
Mercury	Apr 24	–	<0.2
	Jul 17	<0.2	–
	Sep 25	–	<0.2
Molybdenum	Apr 24	–	60
	Jul 17	52	–
	Sep 25	–	60
Nickel	Apr 24	–	4.8
	Jul 17	8.2	–
	Sep 25	–	4.3 (cont.)



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**Table A-4. Site 300 sewer pond wastewater monitoring network 2012 second semester/annual report metals data summary.**

<b>Analyte</b>	<b>Date</b>	<b>3-DSWP-OW</b>	<b>3-ESWP-OW</b>
Potassium	Apr 24	–	66,000
	Jul 17	58,000	–
	Sep 25	–	64,000
Selenium	Apr 24	–	7.6
	Jul 17	4.9	–
	Sep 25	–	6.3
Silver	Apr 24	–	<1
	Jul 17	<10	–
	Sep 25	–	<2
Vanadium	Apr 24	–	<20
	Jul 17	<20	–
	Sep 25	–	<40
Zinc	Apr 24	–	31
	Jul 17	150	–
	Sep 25	–	<40

Note:

– = Analysis not required.

*LLNL Experimental Test Site 300 Compliance Monitoring Report for WDR R5-2008-0148  
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**Table A-5. Site 300 sewer pond wastewater monitoring network second semester/annual 2012 QA data.**

Location	Date	Type	pH Units	Specific Conductance ( $\mu$ mhos/cm)	Biochemical Oxygen Demand (mg/L)	Dissolved Oxygen (mg/L)	Fecal Coliform (MPN/100mL)	Total Coliform (MPN/100mL)	Sodium (mg/L)
3-ESWP-OW	Apr 24	Routine	9.7	5,120	43	14	3,000	24,000	1,200
3-ESWP-OW	Apr 24	Duplicate	–	–	–	–	–	–	1,200
3-ISWP-OW	Sep 25	Routine	8.1	1,780	600	–	–	–	–
3-ISWP-OW	Sep 25	Duplicate	8.1	–	–	–	–	–	–

Note:

– = Analysis not required.

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
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**Table A-6. Site 300 sewer pond ground water monitoring network second semester/annual 2012 anions data summary.**

<b>Well</b>	<b>Date</b>	<b>Sodium (mg/L)</b>	<b>Chloride (mg/L)</b>	<b>Nitrate (as NO3) (mg/L)</b>	<b>Sulfate (mg/L)</b>	<b>Fluoride (mg/L)</b>
W-7ES	Jan 25	160	130	8.7	330	0.16
W-7ES	May 8	–	–	7.7	–	–
W-7ES	Aug 8	170	140	6.4	330	0.34
W-7ES	Nov 13	–	–	6.2	–	–
W-7PS	Jan 25	190	160	14	280	0.25
W-7PS	May 7	–	–	15	–	–
W-35A-04	Jan 30	150	130	11	320	0.42
W-35A-04	May 8	–	–	9.9	–	–
W-35A-04	Aug 8	170	140	8.3	330	0.39
W-35A-04	Nov 12	–	–	8.3	–	–
W-25N-23	Jan 30	150	110	2.0	450	0.47
W-25N-23	Aug 13	150	110	1.2	460	0.50
W-25N-22	Jan 30	150	120	6.4	420	0.38
W-25N-22	Aug 13	160	140	8.5	480	0.61
W-26R-01	Jan 24	200	160	35	240	0.36
W-26R-01	May 7	–	–	36	–	–
W-26R-01	Aug 6	200	160	37	240	0.37
W-26R-01	Nov 7	–	–	35	–	–
W-26R-05	Jan 23	150	100	1.9	210	0.28
W-26R-05	May 7	–	–	<0.5	–	–
W-26R-05	Aug 6	140	92	0.54	210	0.39
W-26R-05	Nov 12	–	–	0.72	–	–
W-26R-11	Jan 24	160	130	10	280	0.33
W-26R-11	May 7	–	–	8.5	–	–
W-26R-11	Aug 6	170	130	8.8	260	0.34
W-26R-11	Nov 7	–	–	8.4	–	–
W-7DS	Jan 23	160	130	8.9	320	0.26
W-7DS	May 7	–	–	6.9	–	–
W-7DS	Aug 8	160	130	6.7	320	0.34
W-7DS	Nov 7	–	–	6.3	–	–

Note:

– = Analysis not required.

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
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**Table A-7. Site 300 sewer pond ground water monitoring network second semester/annual 2012 coliform data summary.**

<b>Well</b>	<b>Date</b>	<b>Fecal Coliform (MPN/100mL)</b>	<b>Total Coliform (MPN/100mL)</b>
W-7ES	Jan 26	<2	<2
W-7ES	May 9	<2	<2
W-7ES	Aug 9	<2	<2
W-7ES	Nov 14	<2	<2
W-7PS	Jan 26	<2	<2
W-7PS	May 8	<2	<2
W-35A-04	Jan 31	<2	<2
W-35A-04	May 9	<2	>1,600
W-35A-04	Jun 7	<2	240
W-35A-04	Aug 9	<2	<2
W-35A-04	Nov 13	<2	<2
W-25N-23	Jan 31	<2	<2
W-25N-23	Aug 14	<2	<2
W-25N-22	Jan 31	<2	<2
W-25N-22	Aug 14	<2	<2
W-26R-01	Jan 25	<2	<2
W-26R-01	May 8	<2	<2
W-26R-01	Aug 7	<2	<2
W-26R-01	Nov 8	<2	<2
W-26R-05	Jan 26	<2	<2
W-26R-05	May 10	<2	<2
W-26R-05	Aug 9	<2	<2
W-26R-05	Nov 15	<2	<2
W-26R-11	Jan 25	<2	<2
W-26R-11	May 8	<2	<2
W-26R-11	Aug 7	<2	<2
W-26R-11	Nov 8	<2	<2
W-7DS	Jan 24	<2	<2
W-7DS	May 8	<2	<2
W-7DS	Aug 9	<2	<2
W-7DS	Nov 8	<2	<2

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**Table A-8. Site 300 sewer pond ground water monitoring network second semester/annual 2012 physical chemistry data.**

Well	Date	pH	Specific Conductance ( $\mu$ mhos/cm)	Total Alkalinity (as CaCO <sub>3</sub> ) (mg/L)	Total dissolved solids (mg/L)	Total Hardness (as CaCO <sub>3</sub> ) (mg/L)	Total Phosphorus (as PO <sub>4</sub> ) (mg/L)
W-7ES	Jan 25	8.0	1,520	290	1,000	460	<0.15
W-7ES	May 8	7.8	1,520	—	—	—	—
W-7ES	Aug 8	8.1	1,520	300	1,000	480	<1
W-7ES	Nov 13	7.7	1,500	—	—	—	—
W-7PS	Jan 25	7.7	1,580	310	1,100	410	<0.15
W-7PS	May 7	7.9	1,460	—	—	—	—
W-35A-04	Jan 30	8.0	1,500	280	1,000	430	<0.15
W-35A-04	May 8	7.8	1,510	—	—	—	—
W-35A-04	Aug 8	8.0	1,510	290	1,000	450	<1
W-35A-04	Nov 12	7.7	1,450	—	—	—	—
W-25N-23	Jan 30	7.6	1,530	210	1,200	410	<0.15
W-25N-23	Aug 13	8.0	1,480	200	1,100	440	<1
W-25N-22	Jan 30	7.9	1,510	170	1,100	410	<0.15
W-25N-22	Aug 13	7.8	1,540	170	1,100	450	<1
W-26R-01	Jan 24	7.8	1,420	240	1,000	270	<0.15
W-26R-01	May 7	8.0	1,530	—	—	—	—
W-26R-01	Aug 6	7.9	1,360	250	970	280	<1
W-26R-01	Nov 7	7.8	1,420	—	—	—	—
W-26R-05	Jan 23	8.1	1,130	210	800	230	0.29
W-26R-05	May 7	8.2	1,070	—	—	—	—
W-26R-05	Aug 6	7.9	1,010	200	740	220	<1
W-26R-05	Nov 12	7.9	1,010	—	—	—	—
W-26R-11	Jan 24	8.0	1,410	280	990	380	<0.15
W-26R-11	May 7	7.8	1,340	—	—	—	—
W-26R-11	Aug 6	7.8	1,280	270	940	370	<1
W-26R-11	Nov 7	7.6	1,350	—	—	—	—
W-7DS	Jan 23	7.7	1,520	290	1,100	450	0.19
W-7DS	May 7	7.8	1,430	—	—	—	—
W-7DS	Aug 8	8.0	1,490	290	1,000	460	<1
W-7DS	Nov 7	7.6	1,480	—	—	—	—

Note:

— = Analysis not required.

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Second Semester/Annual Report 2012

**Table A-9. Site 300 sewer pond ground water monitoring network second semester/annual 2012 metals data summary.**

Analyte (µg/L)	Date	W-7ES	W-7PS	W-35A-04	W-25N-23	W-25N-22	W-26R-01	W-26R-05	W-26R-11	W-7DS
Aluminum	Jan	<50	<50	<50	<50	<50	<50	<50	<50	<50
	Aug	<50	–	<50	<50	<50	<50	<50	<50	<50
Arsenic	Jan	3.4	5.0	3.5	6.0	9.0	9.8	6.7	3.9	2.6
	Aug	3.4	–	4.3	8.2	8.4	9.2	7.9	4.3	3.8
	Nov	–	–	3.7	–	–	–	–	–	–
Barium	Jan	48	65	41	31	26	36	30	54	49
	Aug	46	–	42	28	25	34	<25	45	45
	Nov	–	–	52	–	–	–	–	–	–
Boron	Jan	2,600	2,400	2,600	1,100	950	1,600	1,000	2,200	2,500
	Aug	2,900	–	2,900	1,100	970	1,600	1,000	2,300	2,800
Cadmium	Jan	<50	<50	<50	<50	<50	<50	<50	<50	<50
	Aug	<50	–	<50	<50	<50	<50	<50	<50	<50
	Nov	–	–	<0.5	–	–	–	–	–	–
Calcium	Jan	110,000	95,000	96,000	98,000	99,000	68,000	57,000	87,000	100,000
	Aug	110,000	–	100,000	110,000	110,000	70,000	55,000	86,000	100,000
Chromium	Jan	<1	1.5	1.1	<1	<1	<1	<1	1.1	2.8
	Aug	<1	–	1.1	<1	<1	<1	<1	1.1	<1
	Nov	–	–	<1	–	–	–	–	–	–
Hexavalent Chromium	Jan	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Aug	<2	–	<2	<1	<1	<1	<1	<1	<2
Copper	Jan	1.4	1.6	<1	2.2	<1	2.9	1.2	1.2	1.1
	Aug	1.1	–	<1	1.5	1.3	2.3	1.6	<1	3.1
	Nov	–	–	<10	–	–	–	–	–	–
Iron	Jan	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Aug	<100	–	<100	<100	<100	<100	<100	<100	<100
Lead	Jan	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Aug	<5	–	<5	<5	<5	<5	<5	<5	<5
	Nov	–	–	<2	–	–	–	–	–	–

(cont.)

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table A-9. Site 300 sewer pond ground water monitoring network second semester/annual 2012 metals data summary.**

Analyte (µg/L)	Date	W-7ES	W-7PS	W-35A-04	W-25N-23	W-25N-22	W-26R-01	W-26R-05	W-26R-11	W-7DS
Magnesium	Jan	47,000	41,000	45,000	40,000	39,000	24,000	20,000	39,000	46,000
	Aug	51,000	–	48,000	42,000	43,000	25,000	20,000	37,000	49,000
Manganese	Jan	<30	<30	<30	<30	<30	<30	<30	<30	<30
	Aug	<30	–	<30	<30	<30	<30	<30	<30	<30
Mercury	Jan	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Aug	<0.2	–	<0.2	–	–	<0.2	<0.2	<0.2	<0.2
	Nov	–	–	<0.2	–	–	–	–	–	–
Molybdenum	Jan	<25	<25	<25	<25	27	<25	<25	<25	<25
	Aug	<25	–	<25	<25	<25	<25	27	<25	<25
	Nov	–	–	<25	–	–	–	–	–	–
Nickel	Jan	2.6	2.8	<2	<2	9.7	2.0	<2	2.5	2.0
	Aug	2.9	–	2.9	2.8	13	2.3	<2	3.8	2.8
	Nov	–	–	<5	–	–	–	–	–	–
Potassium	Jan	5,300	5,700	5,100	11,000	11,000	10,000	9,100	5,400	5,200
	Aug	5,400	–	5,400	11,000	11,000	11,000	9,000	5,300	5,300
	Nov	–	–	5,800	–	–	–	–	–	–
Selenium	Jan	5.4	15	2.5	<2	2.1	12	2.4	8.7	4.4
	Aug	5.6	–	4.8	<2	3.2	11	<2	8.7	5.5
	Nov	–	–	4.6	–	–	–	–	–	–
Silver	Jan	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Aug	<10	–	<10	<10	<10	<10	<10	<10	<10
	Nov	–	–	<0.5	–	–	–	–	–	–
Vanadium	Jan	<20	<20	<20	<20	<20	<20	<20	<20	<20
	Aug	<20	–	<20	<20	<20	<20	<20	<20	<20
	Nov	–	–	<25	–	–	–	–	–	–
Zinc	Jan	<20	<20	<20	<20	<20	<20	<20	<20	<20
	Aug	<20	–	<20	<20	<20	<20	<20	<20	<20
	Nov	–	–	<20	–	–	–	–	–	–

Note:

– = Analysis not required.

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table A-10. Site 300 sewer pond ground water monitoring network 2012 second semester/annual QA data.**

Constituent	Units	W-7ES	W-7ES	W-7E	W-7ES	W-26R-0	W-26R-01	W-26R-0	W-26R-01
		Nov 13 Routine	Nov 13 Duplicate	Nov 14 Routine	Nov 14 Duplicate	Nov 7 Routine	Nov 7 Duplicate	Nov 8 Routine	Nov 8 Duplicate
pH	Units	7.7	7.7	–	–	7.8	7.7	–	–
Specific Conductance	μmhos/cm	1,500	1,500	–	–	1,420	1,400	–	–
Fecal Coliform	MPN/100mL	–	–	<2	<2	–	–	<2	<2
Total Coliform	MPN/100mL	–	–	<2	<2	–	–	<2	<2
Nitrate (as NO <sub>3</sub> )	mg/L	6.2	5.7	–	–	35	36	–	–

Note:

– = Analysis not required.



**FIELD TRACKING FORM**  
**EAST END OF SITE 300 SEWAGE POND**

DATE: 09/25/12

TIME: 0940

Lab	FGL	BC
CoC #	57946	57945
Ship It #	57945	166176

<b>Special Instructions:</b> Samples must be taken after 1 p.m. Print collection time on sample bottles. DO/conductivity/pH hold time 24 hr.	<b>Semi-Annual Sampling in 2nd and 4th Quarters (April &amp; Oct)</b>			pH meter calibrated	<u>9/25/12</u>
				Conductivity meter calibrated	<u>9/25/12</u>
				DO meter calibrated	<u>9/25/12</u>

Location	Field Measurements					Comments	Initials	Samples for Lab Analysis
	pH	COND	Depth	DO (PPM)	Temp (°C)			Analytical Codes:
3-ESWP-01-OW (East end of Sewage Pond)	8.26	4.81 mS	1.0'	25.6	24.0			FGLAB E360.1 DO (1x500-mL glass, NO head space) <u>1</u> E120.1A & E150.1A Conductivity/pH (2x250-mL poly) <u>11</u> SM9221 Total, Fecal Coliform (1x250mL) 6hr hold <u>1</u> SM5210B-A BOD (1x500mL poly) <u>1</u>
3-WSWP-01-OW duplicate of 3-ESWP-01-OW							CF, NS	BC Labs E245.2 Mercury (1x500mL Poly acidify HNO3) <u>1</u> S3METALS (1X500mL Poly) <u>1</u>

2Q2012 Duplicate  
 4Q2012 Duplicate

S3METALS  
 See ISWP Field Tracking Form

☒ Copy to Analysts, Allen Grayson & Rick Blake



**FIELD TRACKING FORM**  
**INFLUENT TO SITE 300 SEWAGE POND**

DATE: 09/25/12

TIME: 0925

Lab	FGL
CoC #	57946
Ship It #	HAND Carry

<b>Special Instructions:</b> Semi-Annual Sampling in 2nd and 4th Quarters (April & Oct) Samples should be taken after 1 p.m. during higher flow. Print collection time on sample bottles. BOD Hold Time 48hr. Conductivity/pH Hold Time 24hr.	pH meter calibrated	<u>9/25/12</u>
	Conductivity meter calibrated	<u>9/25/12</u>
	DO meter calibrated	<u>9/25/12</u>

Location	Field Measurements				Comments	Initials	Samples for Lab Analysis
	pH	COND	DO (PPM)	Temp (°C)			
3-ISWP-01-OW (Influent to Sewage Pond)	7.82	1456 <del>465</del>	273	25.4			<b>Analytical Codes:</b> E120.1A & E150.1A (Conductivity/pH) (2 X 250-mL poly) <u>11</u>
3-WSWP-01-OW duplicate of 3-ISWP-01-OW						CL, KB	SM5210B-A (BOD) (1 X 500-mL poly) <u>1</u>

2Q2012 Duplicate  
 4Q2012 Duplicate



See ESWP Field Tracking Form  
 E150.1A

☒ Copy to Analyst, Allen Grayson & Rick Blake

**EPD: EMAD/PRAD/ESP**  
**Lawrence Livermore National Laboratory**  
**P.O. Box 808 L-629**  
**Livermore, CA 94551**

**Access/COC #:** 57946  
**Document Control #:** 57946  
**Requester/LLNL Analyst:** R. Blake  
**Organization / Sampler:** EPD / brunckhorst2  
**PCI Project #:** 35166  
**PCI Task #:** 1.03.02.06.02.06  
**Fax/Email #1:** swanson15@llnl.gov  
**DMT Additional Copies:**

**Additional Instructions:**

Relinquished Signature		Company	Date	Time	Received Signature		Company	Date	Time
1		LLNL/EPD	9/25/12	10:55	2		FGL	9/25/12	10:59
2					3				
3					4				
4					5				

# Chain of Custody

**EPD: EMAD/PRAD/ESP**  
**Lawrence Livermore National Laboratory**  
**P.O. Box 808 L-629**  
**Livermore, CA 94551**


Work Authorized By: EPD  
TRR Approver: RUDY JIMENEZ  
Project Info: \_\_\_\_\_

**Access/COC #:** 57945  
**Document Control #:** 57945  
**Requester/LLNL Analyst:** R. Blake  
**Organization / Sampler:** EPD / brunckhorst2  
**PCI Project #:** 35166  
**PCI Task #:** 1.03.02.06.02.06  
**Fax/Email #1:** swanson15@llnl.gov  
**DMT Additional Copies:**

**Analytical Lab : BCLABS-BAK**  
**TAT: 20d**  
**lytical Lab Log #:** \_\_\_\_\_  
**Project/Network: WDRPOND**  
**LLNL Acct #: 3297-41**  
**Release #: UNICARD**  
**Fax/Email #2:** \_\_\_\_\_

**Additional Instructions:**

[illegible]

Relinquished Signature		Company	Date	Time	Received Signature		Company	Date	Time
1		LLNL/EPD	9/25/2012		2				
2					3				
3					4				
4					5				



**FIELD TRACKING FORM  
SITE 300 SEWAGE POND DISCHARGE**

DATE: 7-17-12

Lab	COC #
BC Labs	57425
Ship It #	103076
FruitGrowers	57426
Ship It #	

**Special Instructions:** Sample only when discharge from sewage pond occurs.

Samples should be taken after 1 p.m. during higher flow.

Print collection time on sample bottles.

BOD/Nutrients Hold Time 48hr; Coliform 6hr; Conductivity/pH 24hr

Due to short hold times, FGL samples should be hand delivered to meet 6 hr hold time.

FGL Stockton (209)942-0182. Courier pickup 1st Tues of each month at S300 watershed 12:30pm, call 27923 for Tues pickup times at LLNL.

pH meter calibrated ☒  
Conductivity meter calibrated ☒  
DO meter calibrated NA

Location	pH	COND	Field Measurements			Comments	Initials	Samples for Lab Analysis	
			Depth	DO (PPM)	Temp (°C)			Analytical Codes:	Time Collected
3-DSWP-01-OW (Discharge Pipe From Sewage Pond)	10.03	1.14mS			22.3	didn't have DO meter for field measurements	CR, GB	FGLAB E360.1 DO (1x500-mL glass, NO head space)	<input checked="" type="checkbox"/> 0930
Time Collected								E120.1A & E150.1A Conductivity/pH (2x250-mL poly)	<input checked="" type="checkbox"/>
								SM9221 Total, Fecal Coliform (1x250mL) 6hr hold	
								SM5210B-A BOD (1x500mL poly)	<input checked="" type="checkbox"/>
								BC Labs S3METALS (1x500mL Poly)	<input checked="" type="checkbox"/>
								E245.2 Mercury (1x500mL Poly acidify HNO3)	<input checked="" type="checkbox"/>

☒ Copy to Analyst, Allen Grayson & Rick Blake

# Chain of Custody

EPD: EMAD/PRAD/ESPD  
Lawrence Livermore National Laboratory  
P.O. Box 808 L-629  
Livermore, CA 94551

Work Authorized By: EPD  
TRR Approver: RUDY JIMENEZ  
Project Info: \_\_\_\_\_

Access/COC #: 57425  
Document Control #: 57425  
Requester/LLNL Analyst: R. Blake  
Organization / Sampler: EPD / rosene1  
PCI Project #: 35166  
PCI Task #: 1.03.02.06.02.06  
Fax/Email #1: swanson15@llnl.gov  
DMT Additional Copies:

Analytical Lab : BCLABS-BAK  
TAT: 20d  
Analytical Lab Log #: \_\_\_\_\_  
Project/Network: SPECIAL  
LLNL Acct #: 3297-41  
Release #: \_\_\_\_\_  
Fax/Email #2: 925-422-2748

**Additional Instructions:**

[illegible]

Relinquished Signature	Company	Date	Time	Received Signature	Company	Date	Time
1	LLNL/EPD	7/17/2012		2			
2				3			
3				4			
4				5			

## Chain of Custody

EPD: EMAD/PRAD/ESPD  
Lawrence Livermore National Laboratory  
P.O. Box 808 L-629  
Livermore, CA 94551

Work Authorized By: EPD

TRR Approver: RUDY JIMENEZ

**Project Info:**

Access/COC #: 57426

Document Control #: 57426

Requester/LLNL Analyst: R.Blake

Organization / Sampler: EPD / rosene1

PCI Project #: 35166

PCI Task #: 1.03.02.06.02.06

Fax/Email #1: swanson15@ltnl.gov

DMT Additional Copies:

Analytical Lab :FRUITGROWL

TAT:20d

Analytical Lab Log #:

Project/Network: SPECIAL

LLNL Acct #: 3297-41

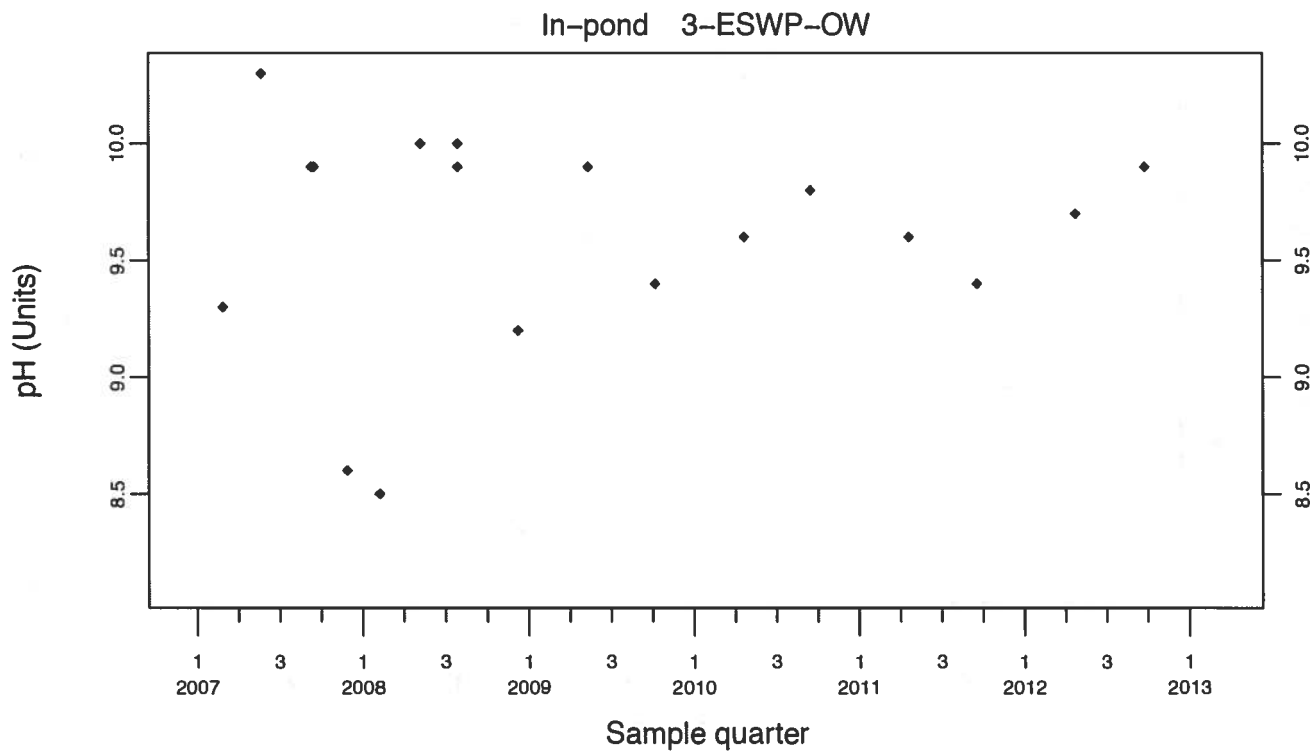
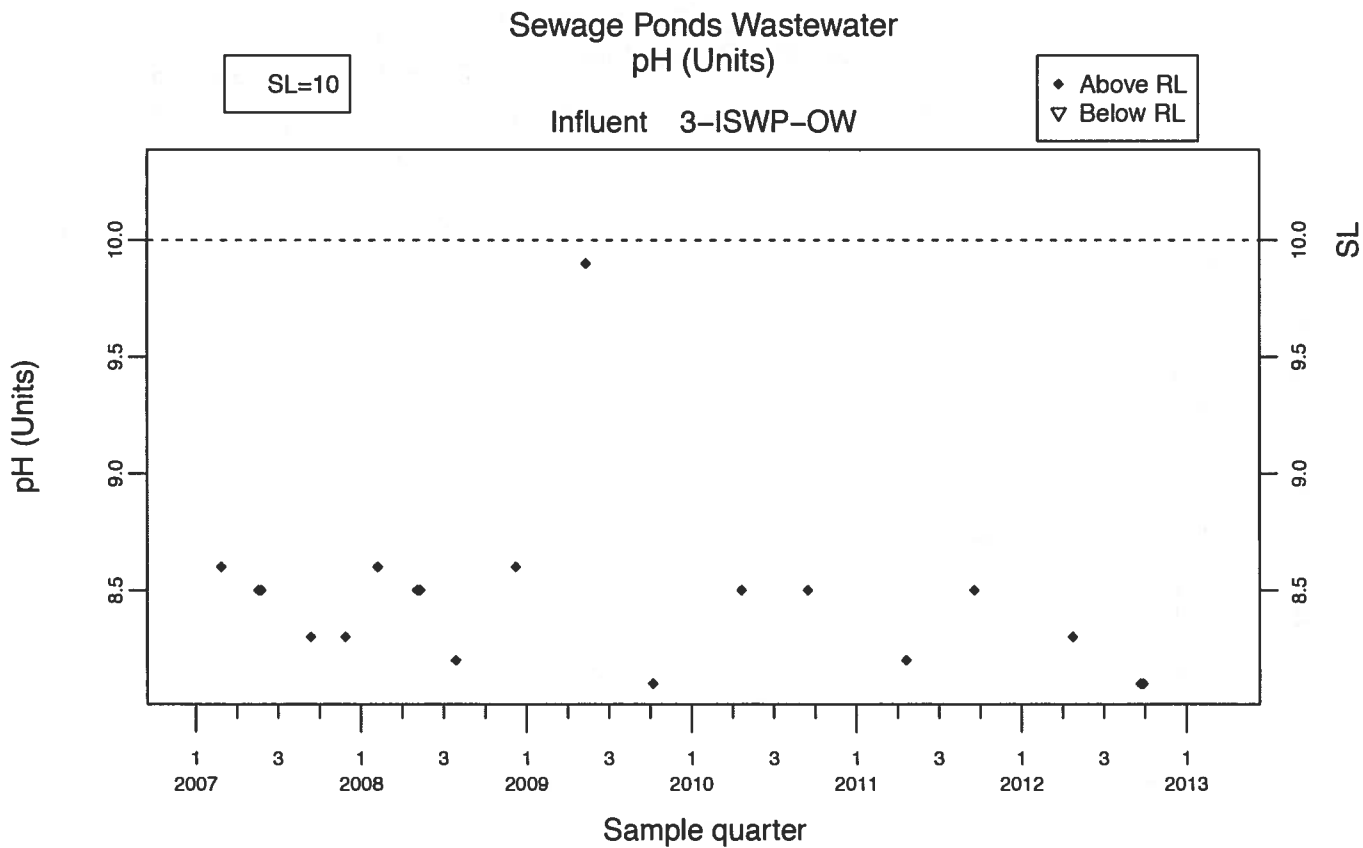
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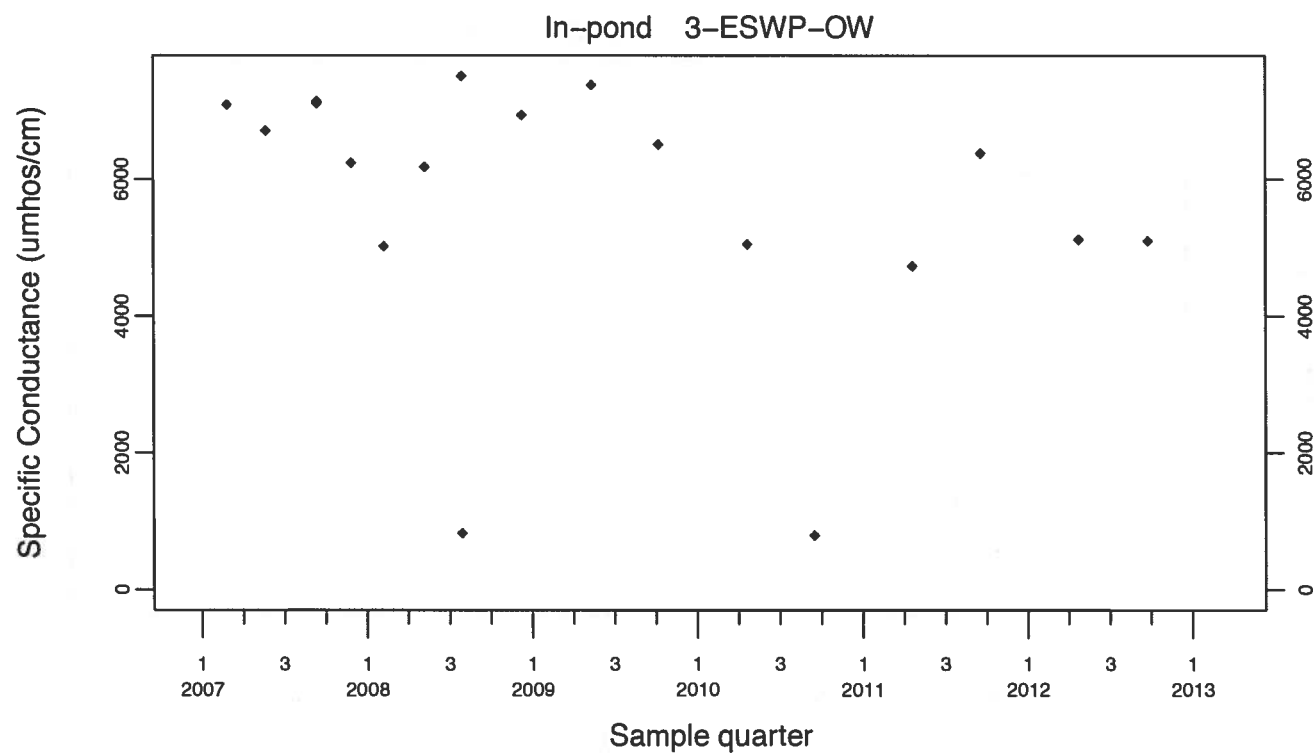
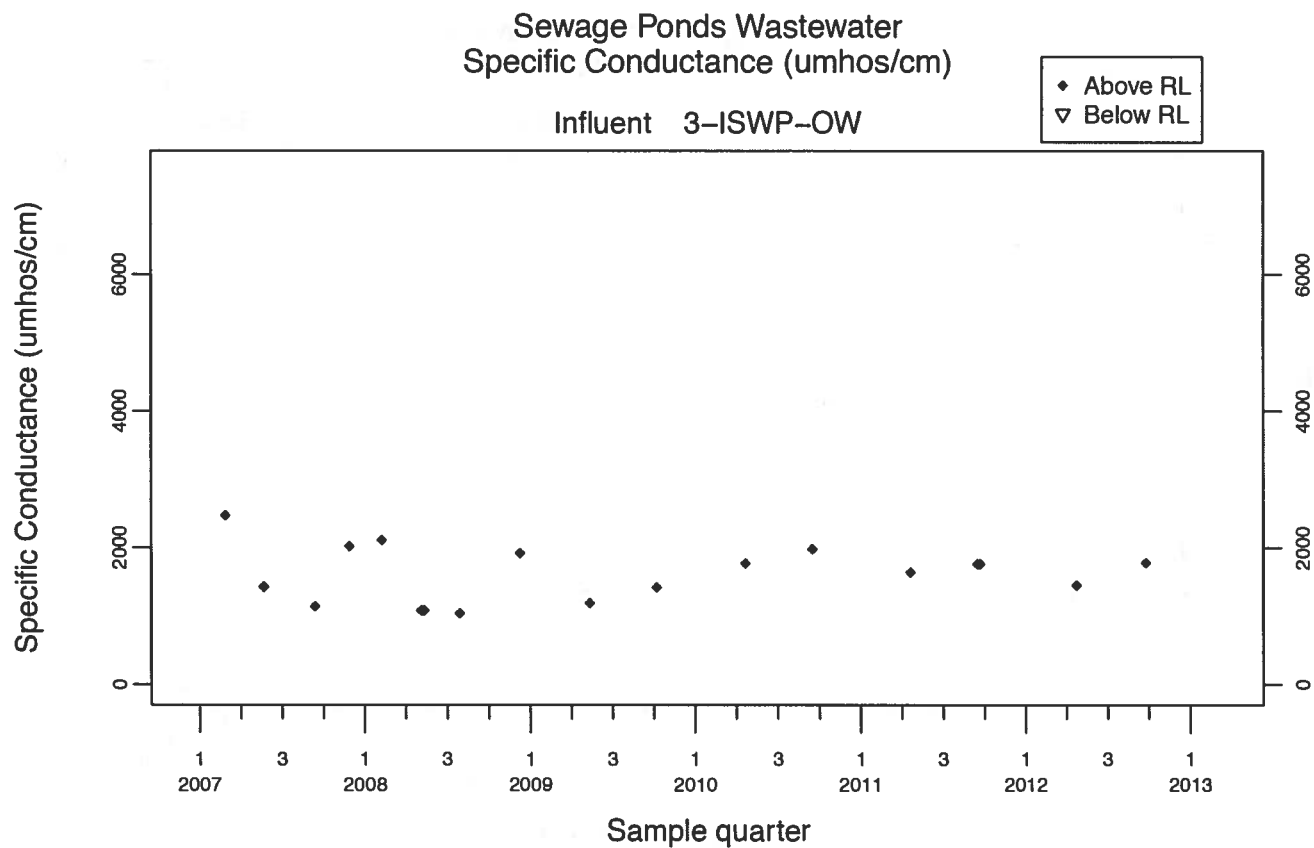
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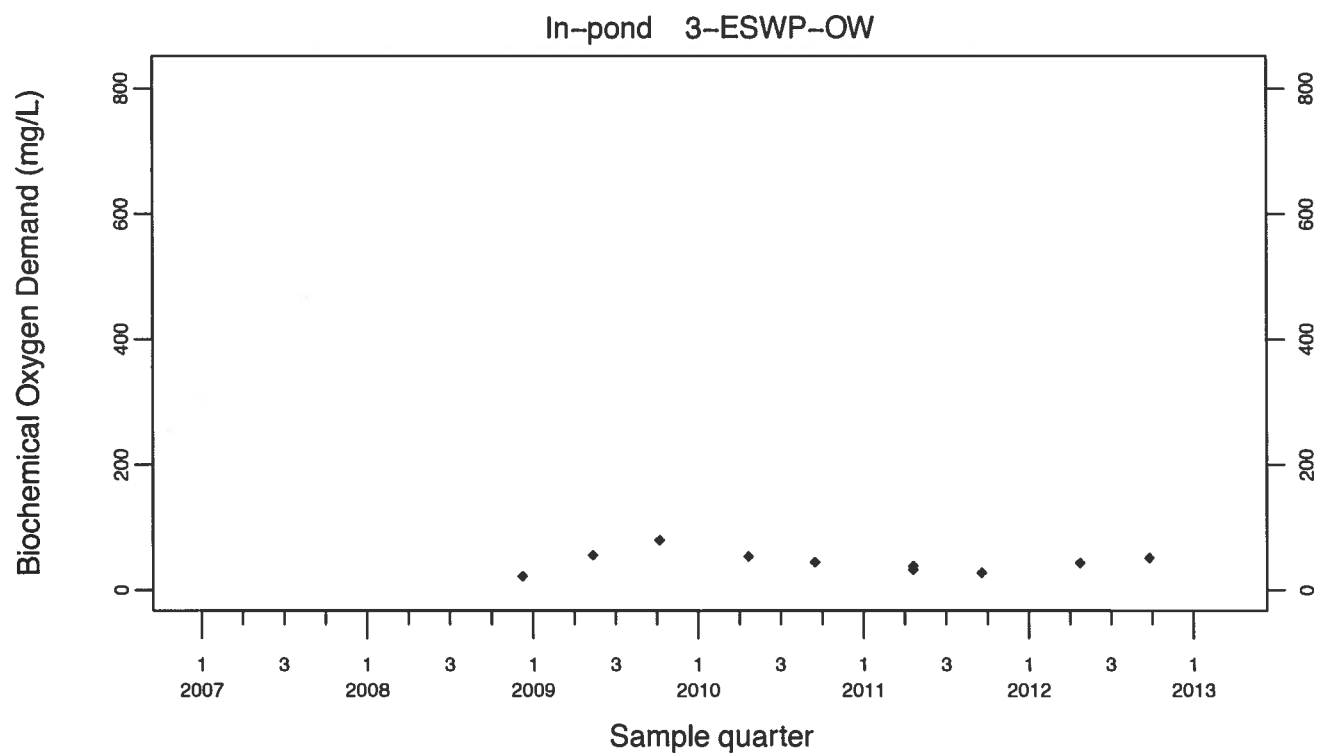
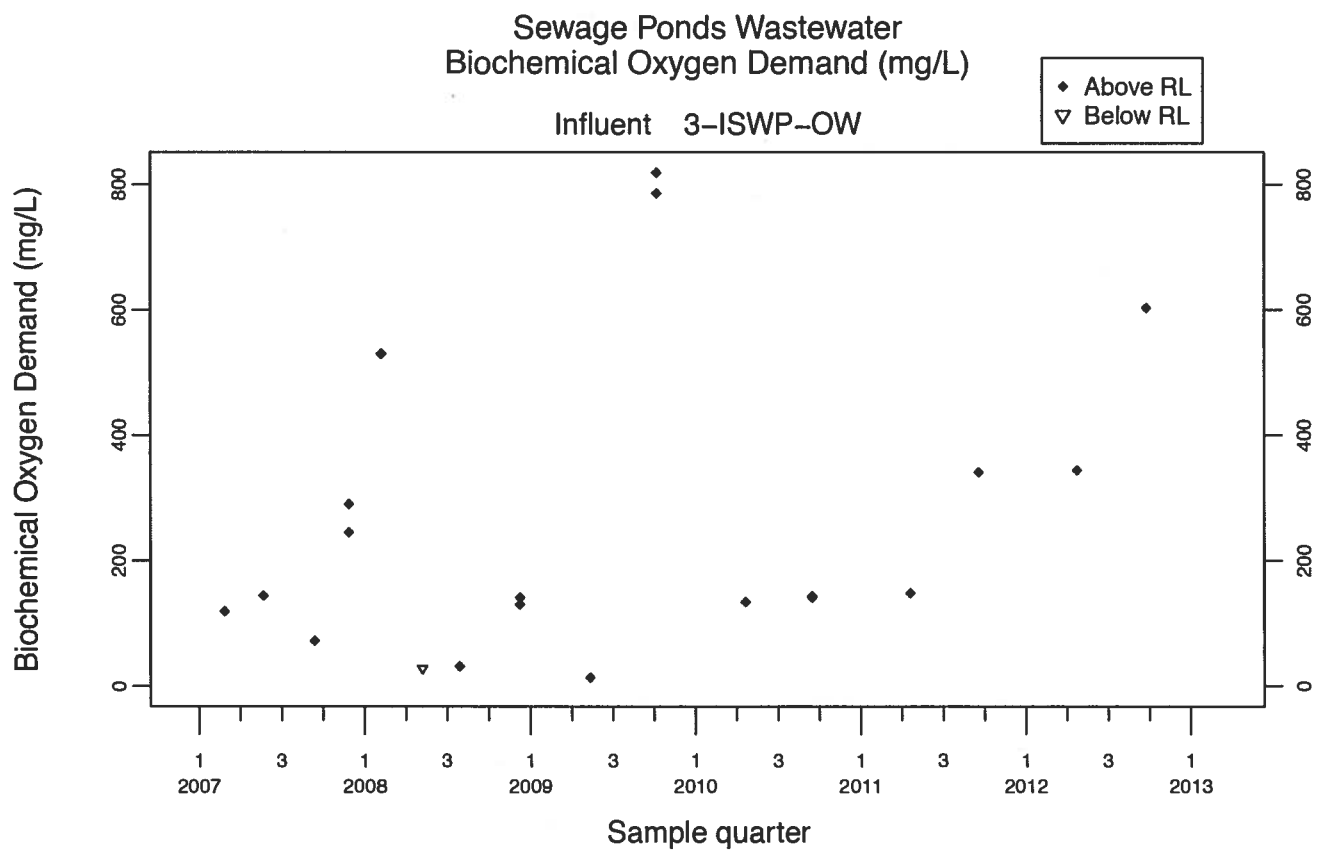
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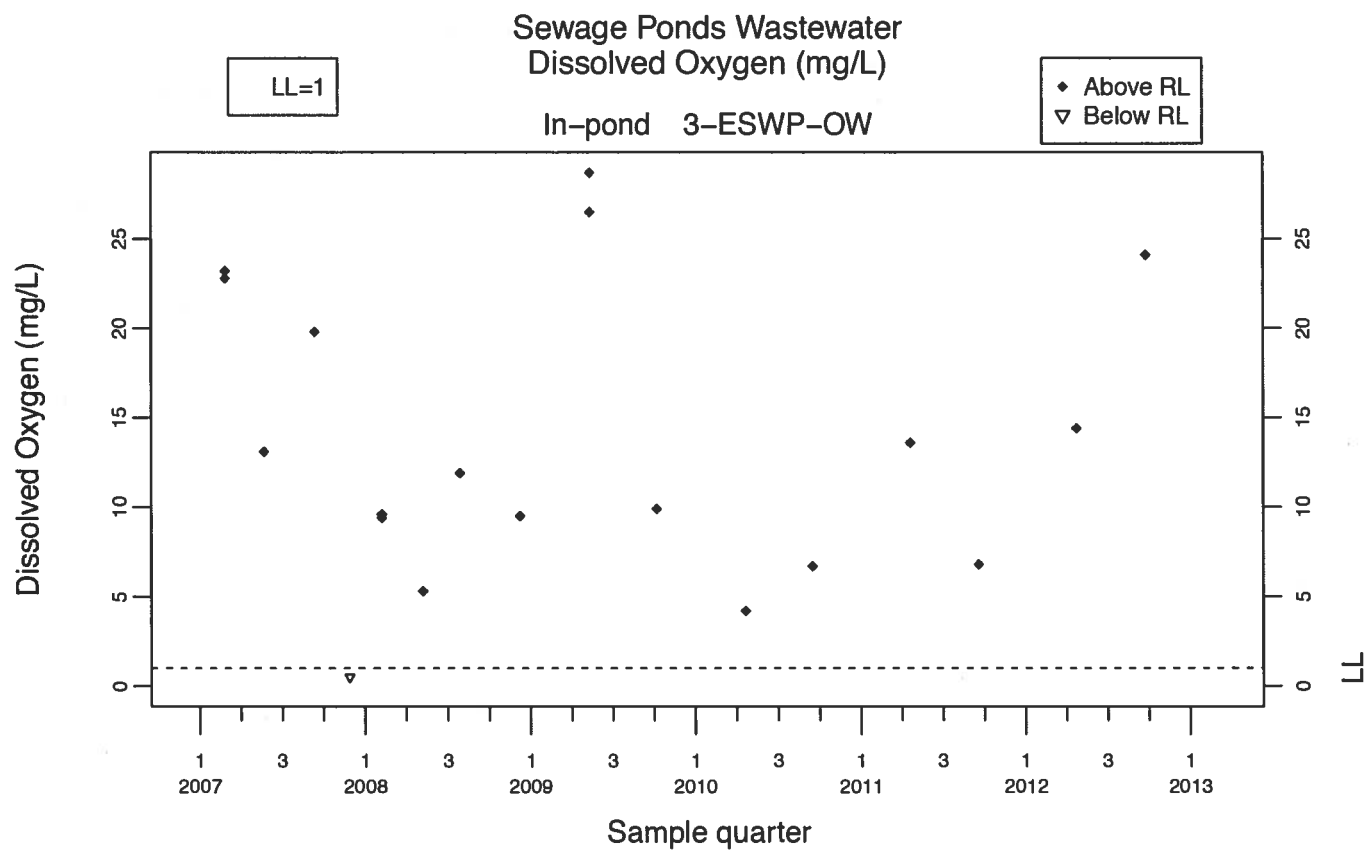
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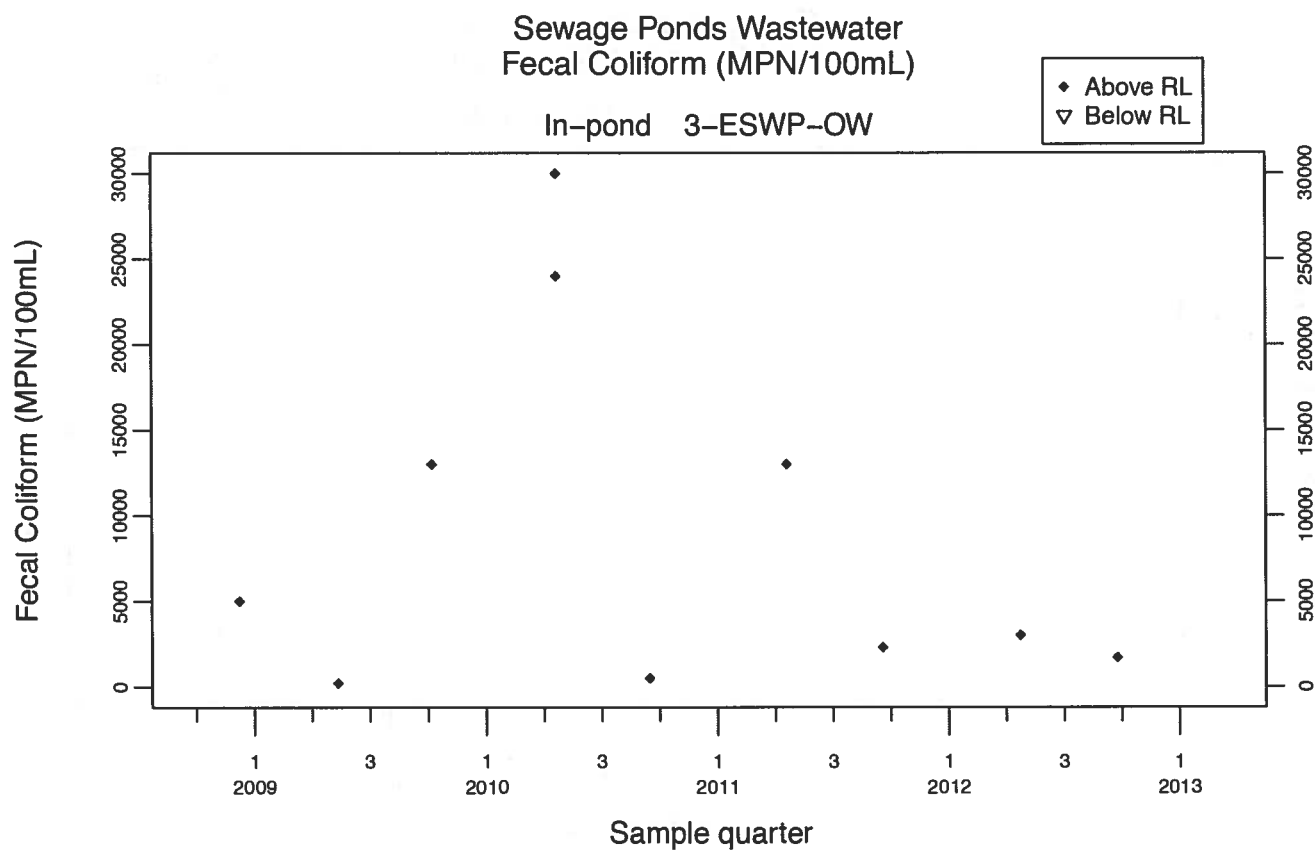


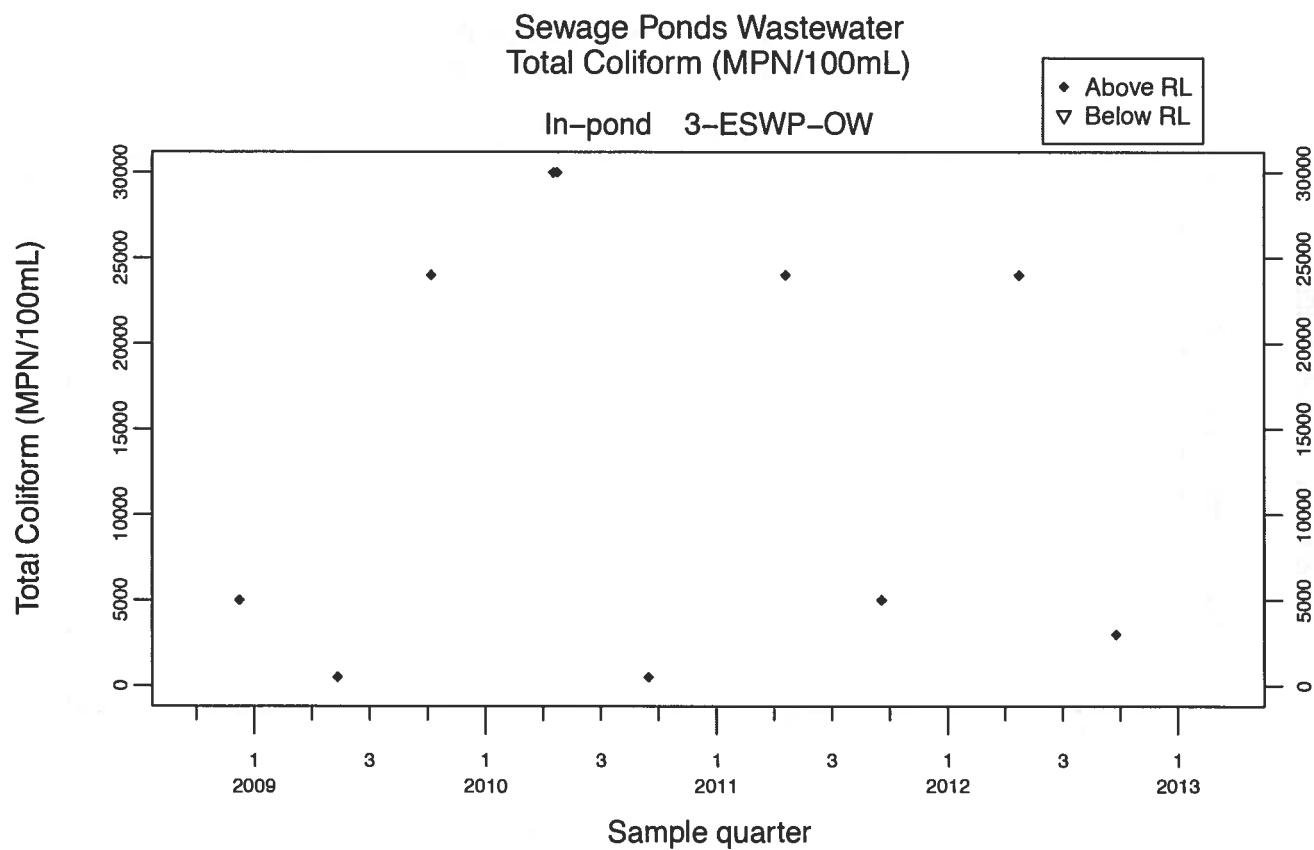


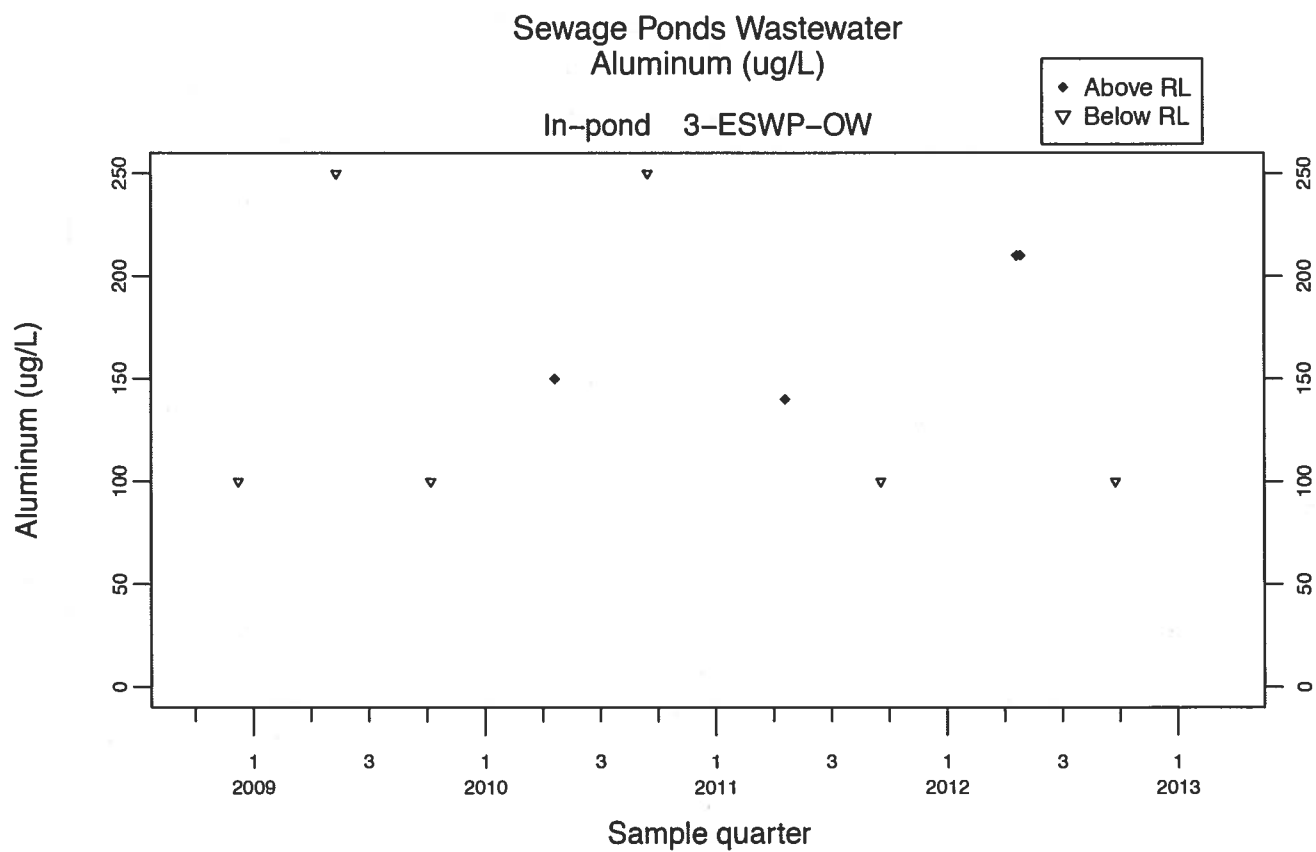


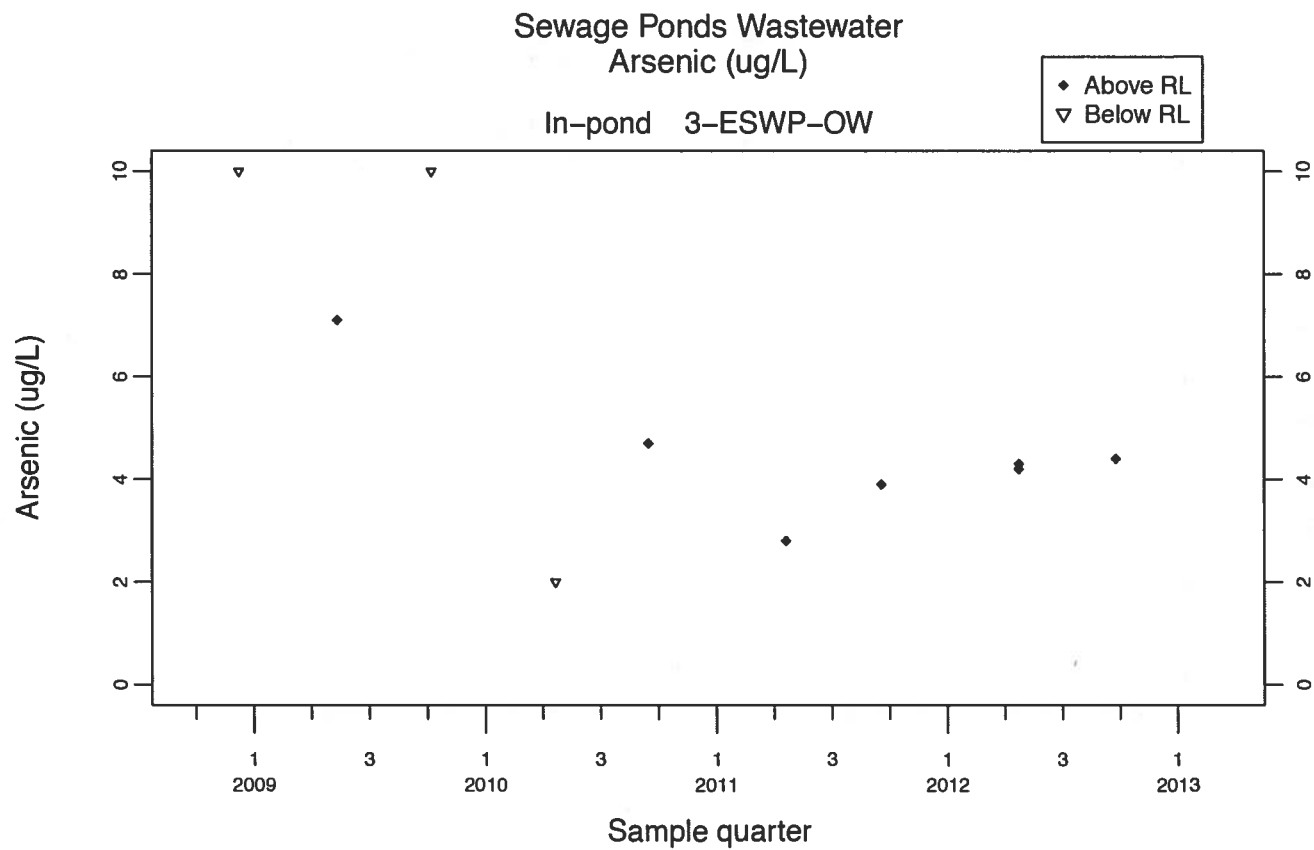


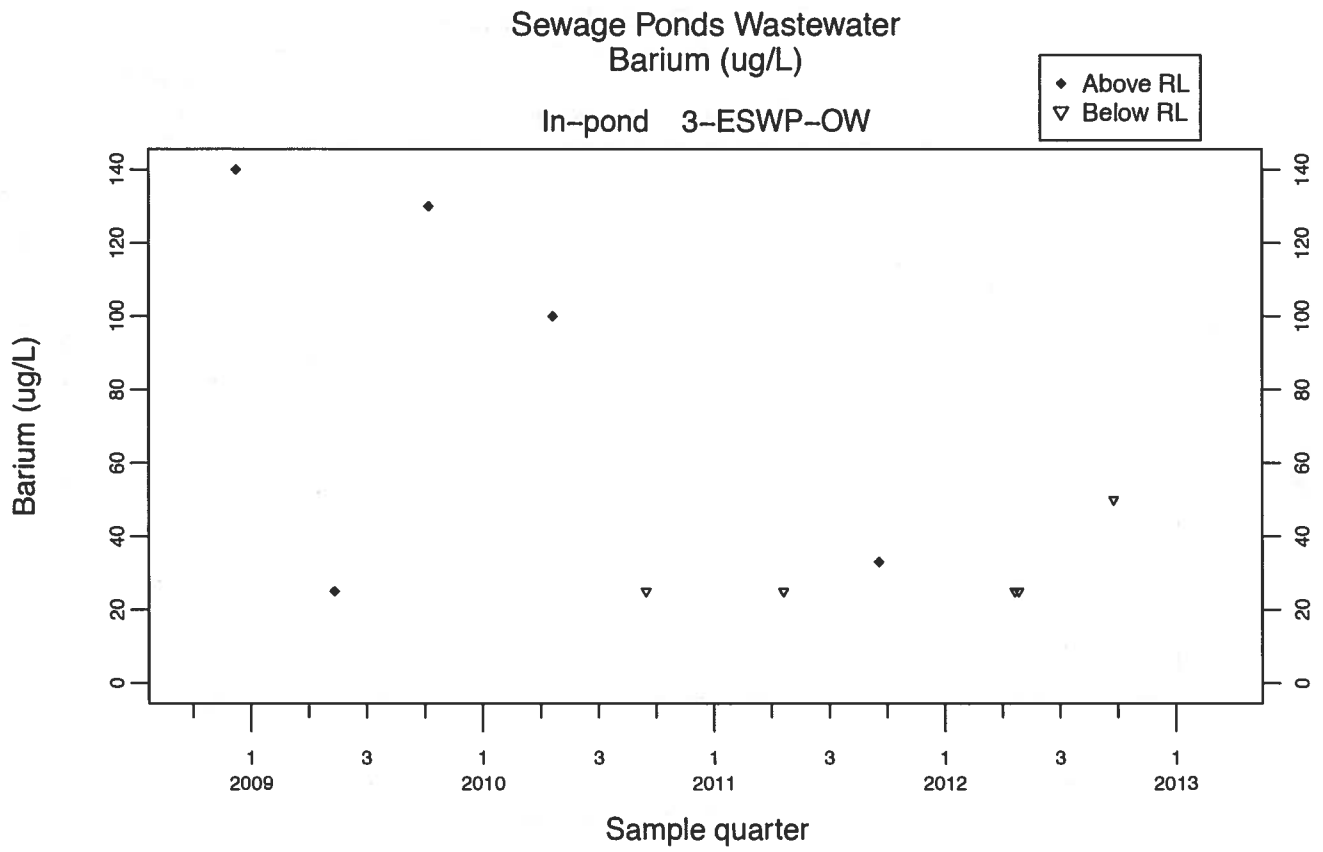




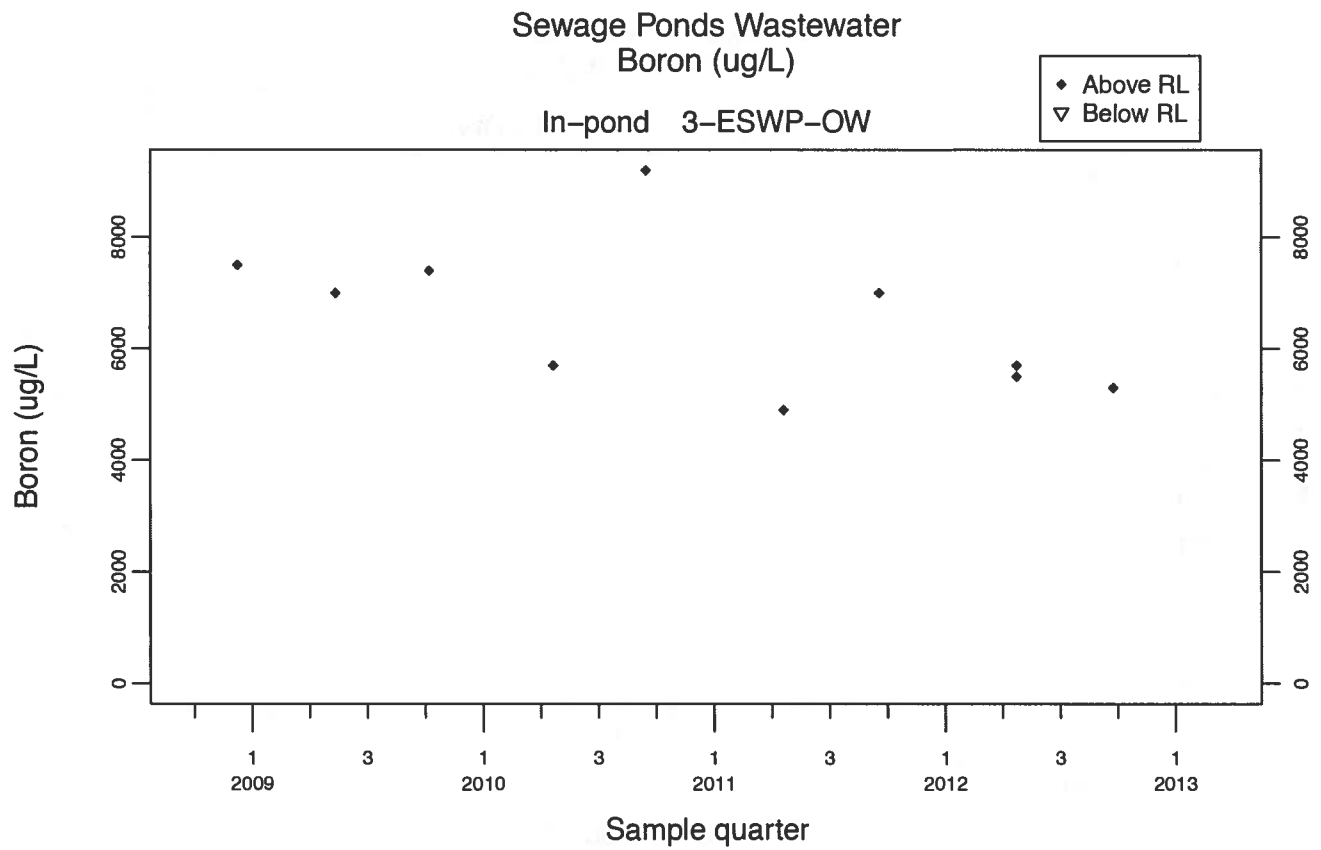


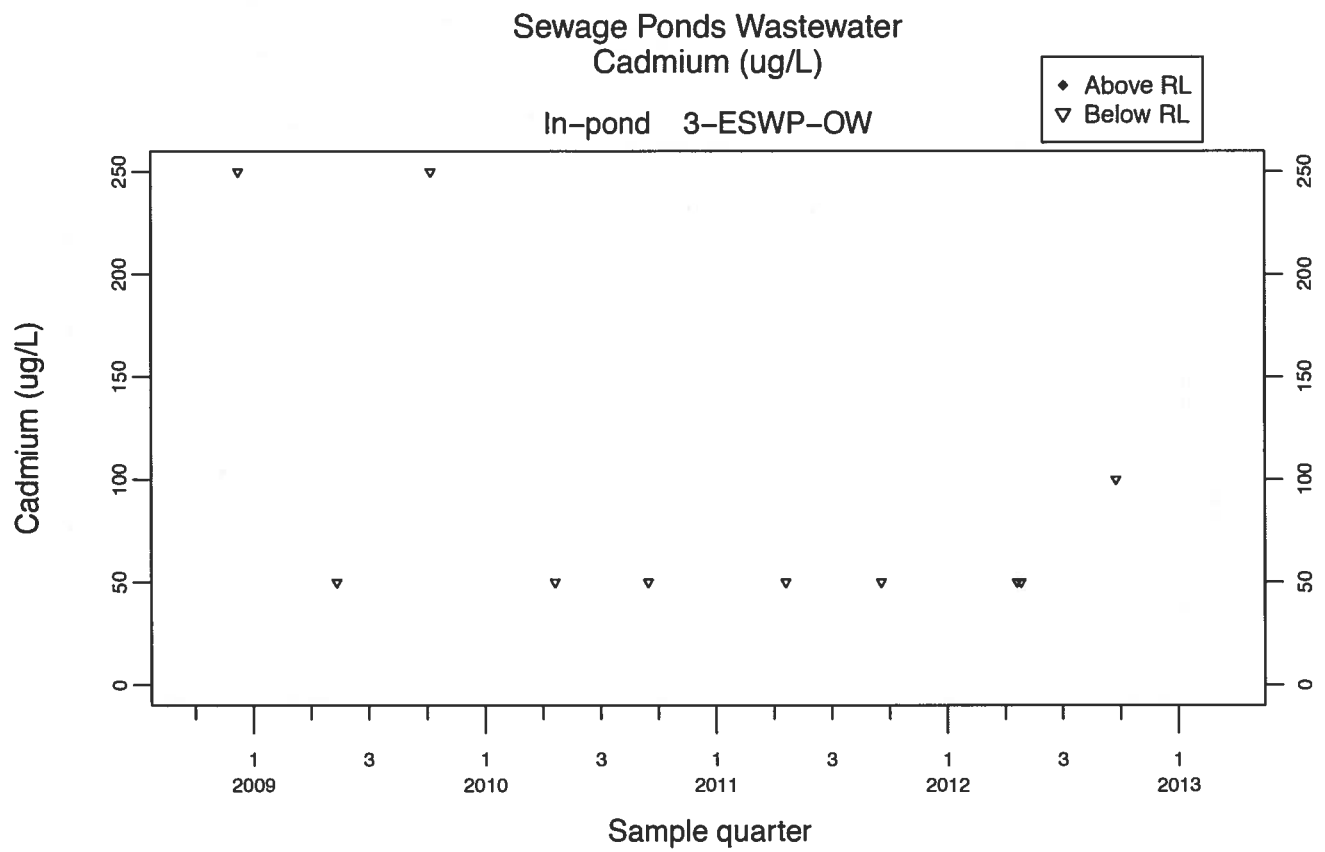


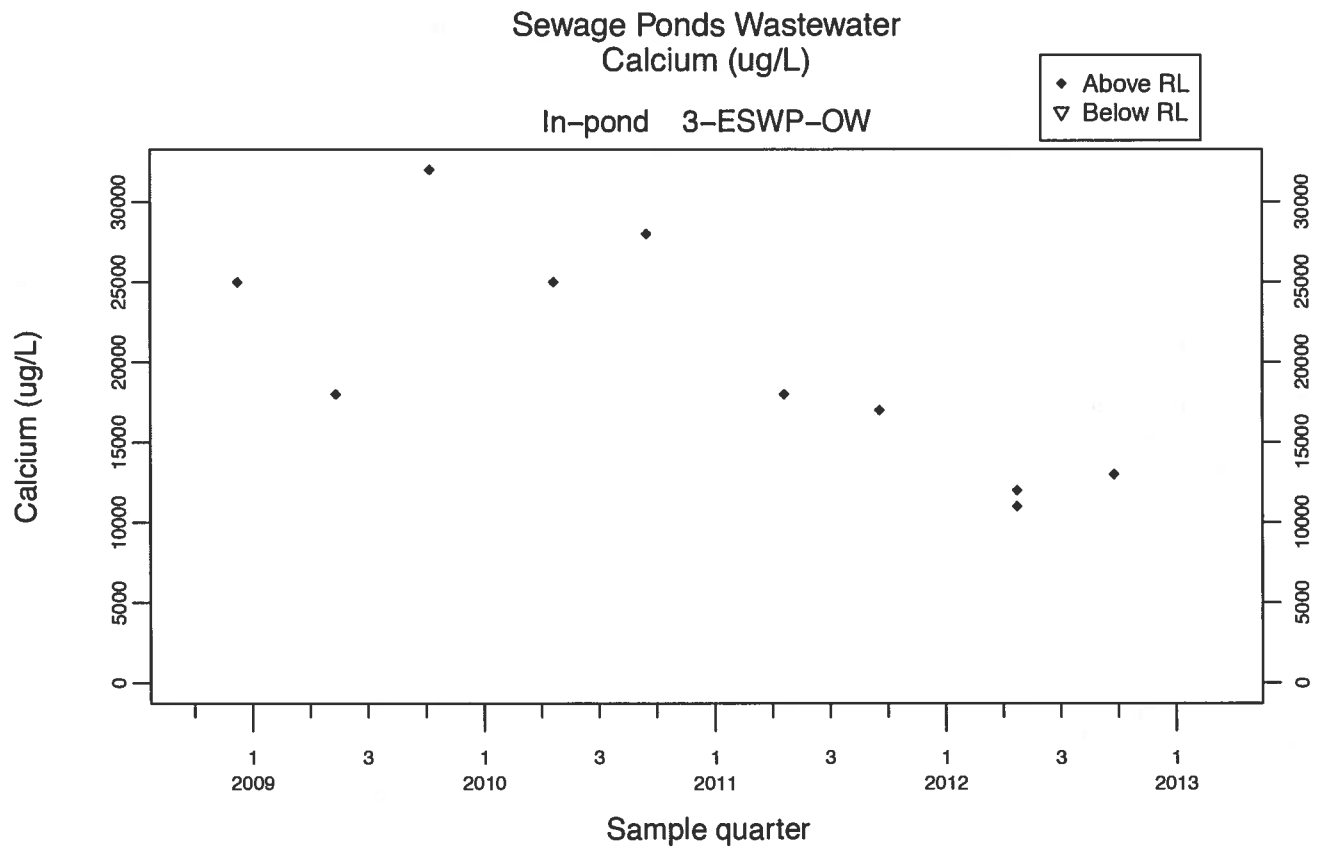


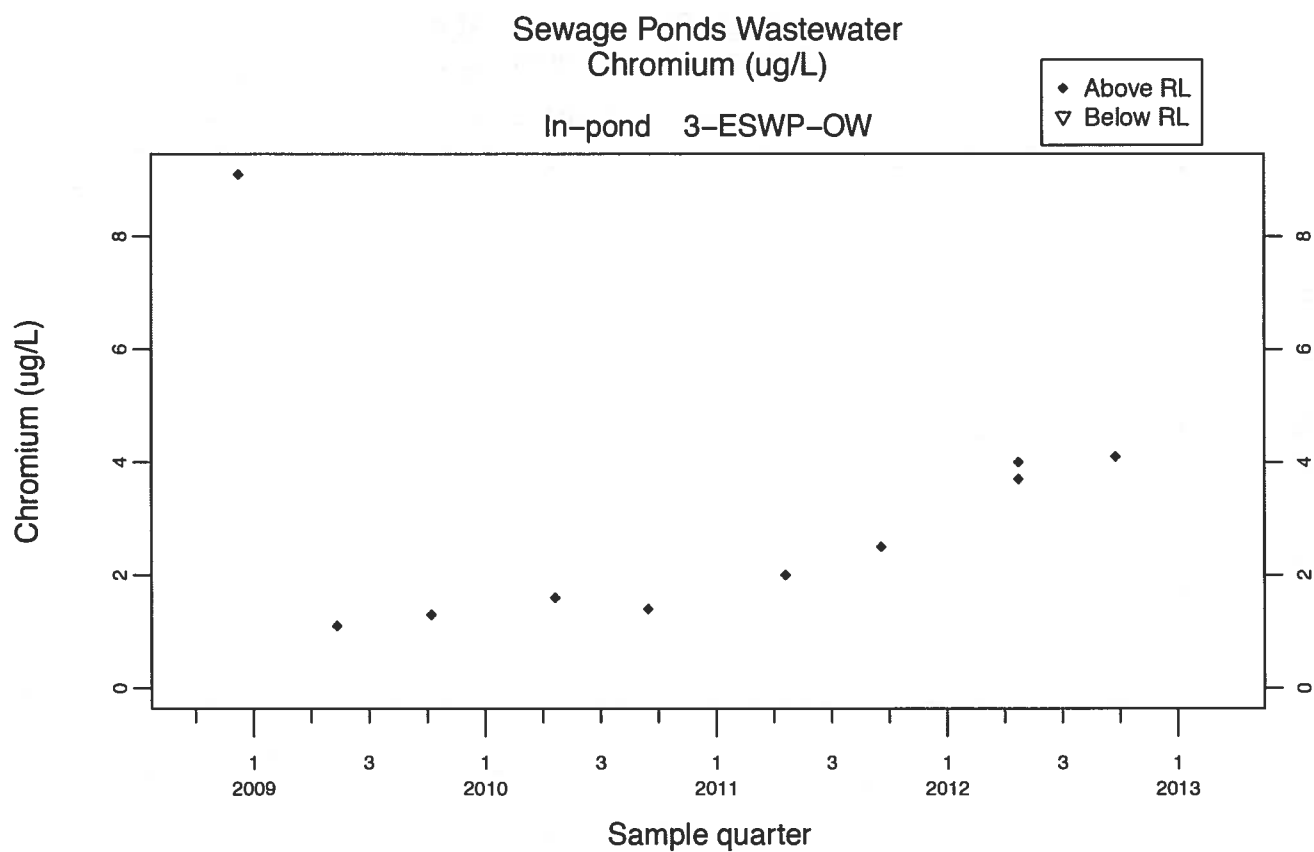


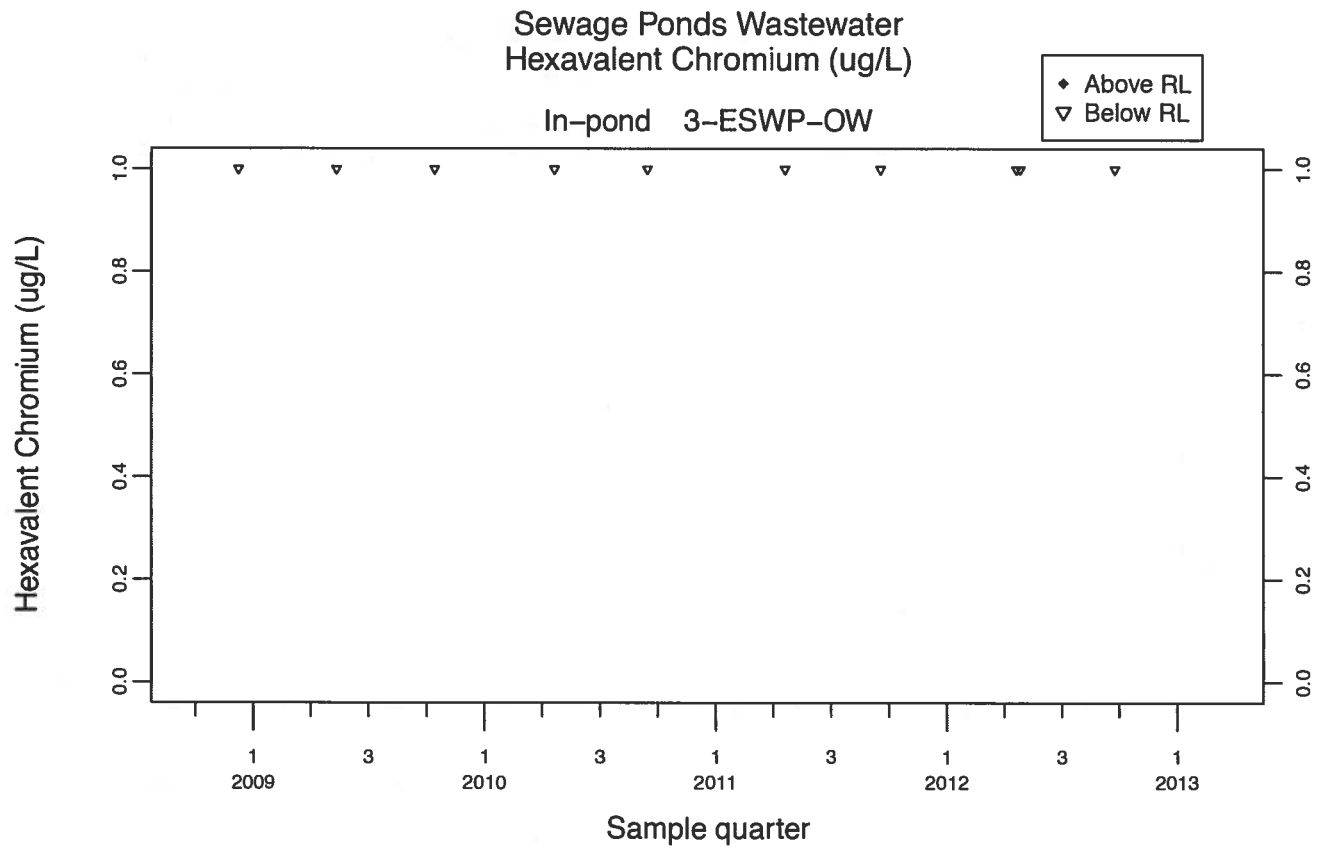


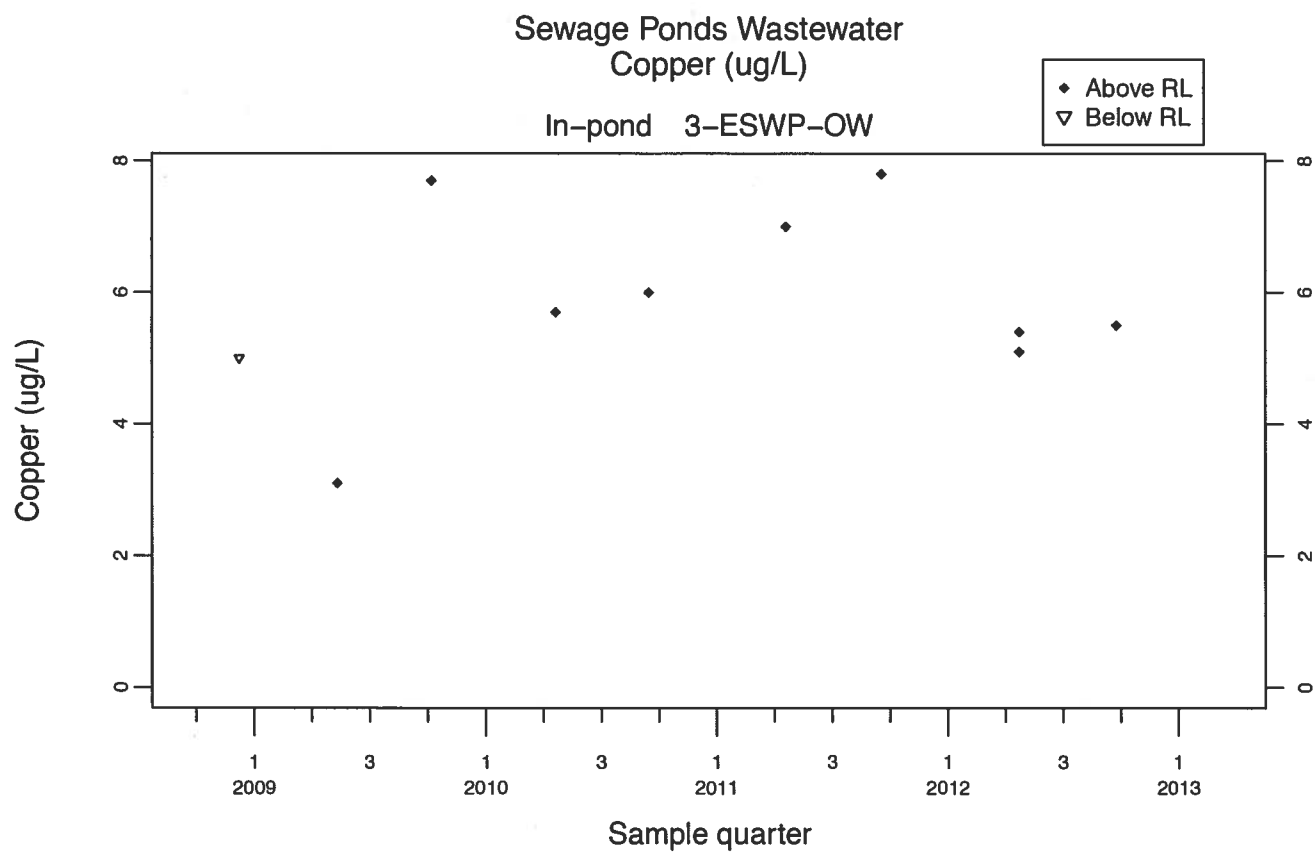


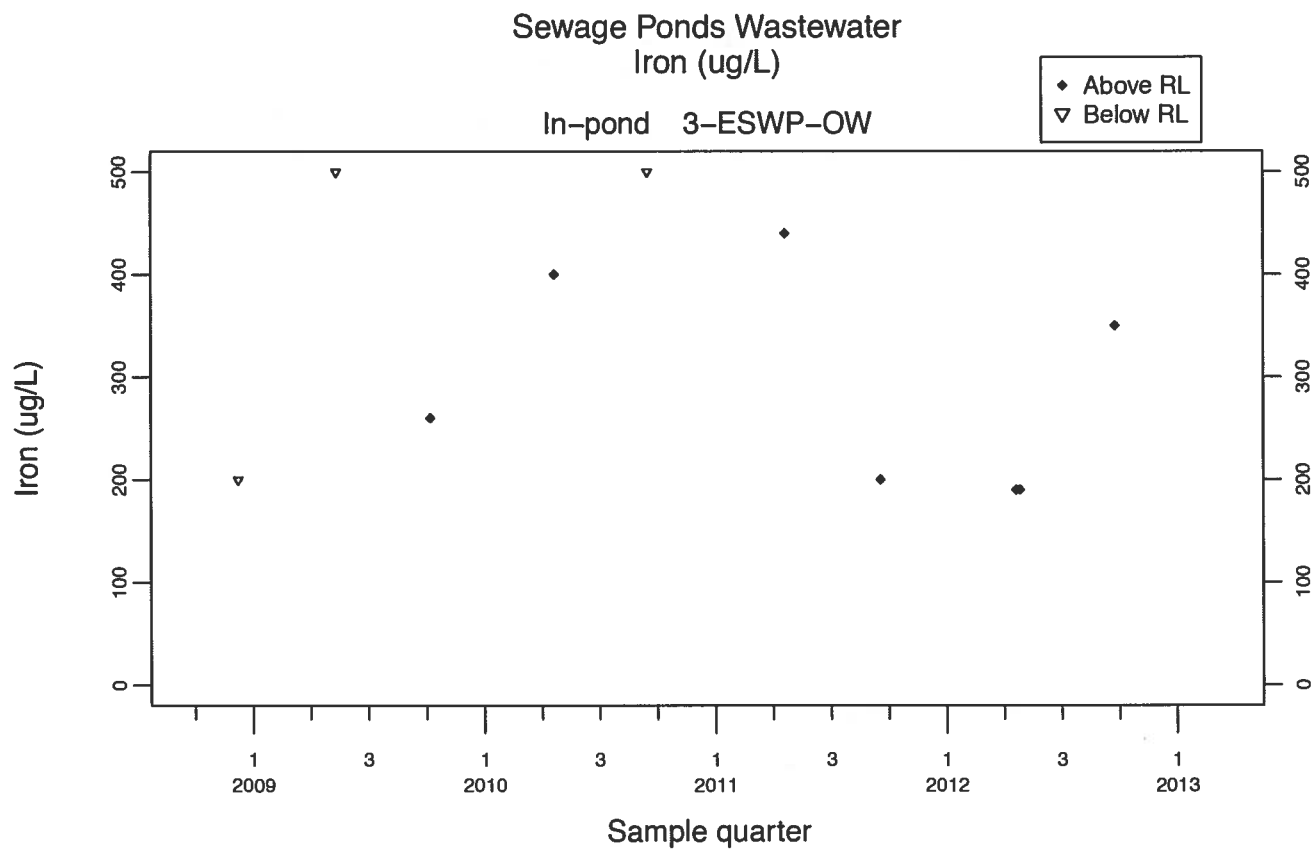


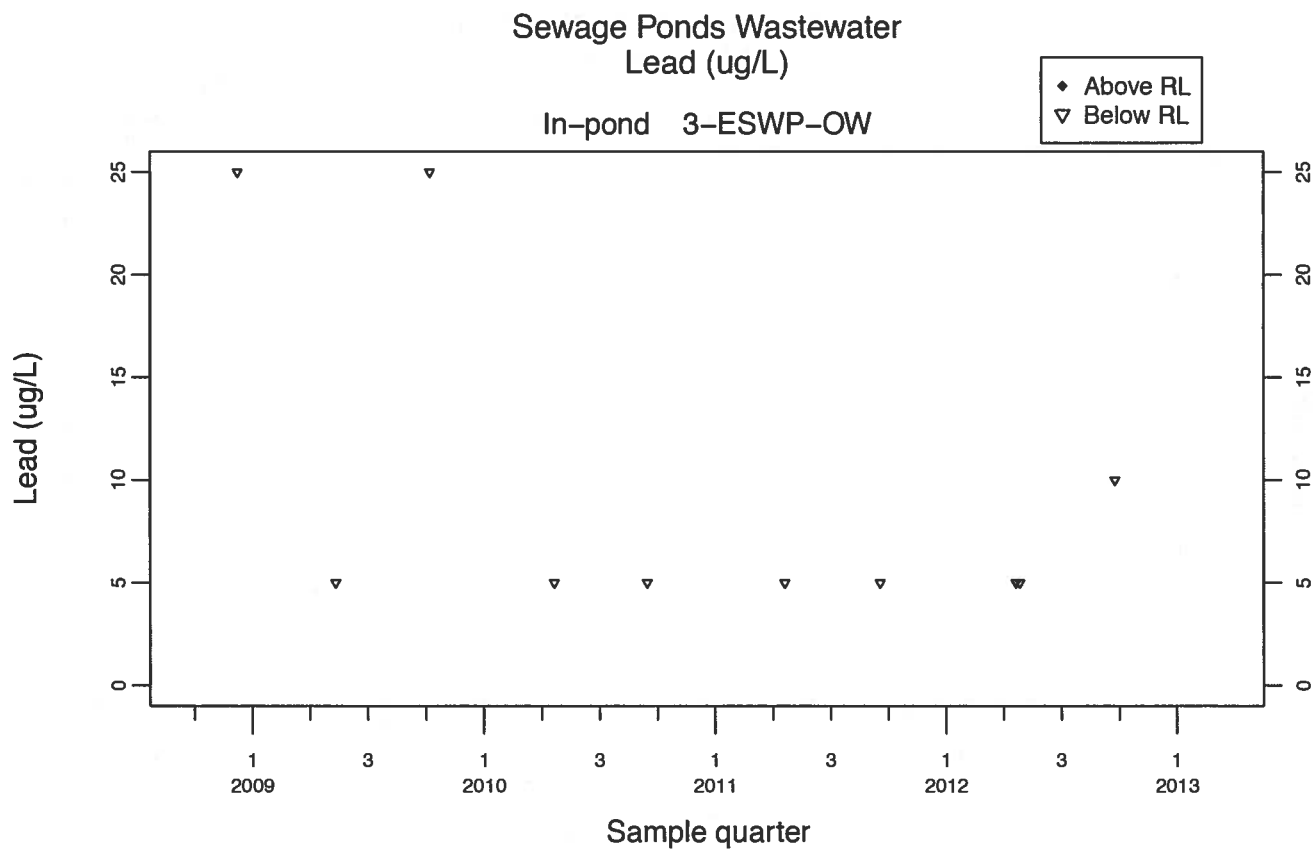




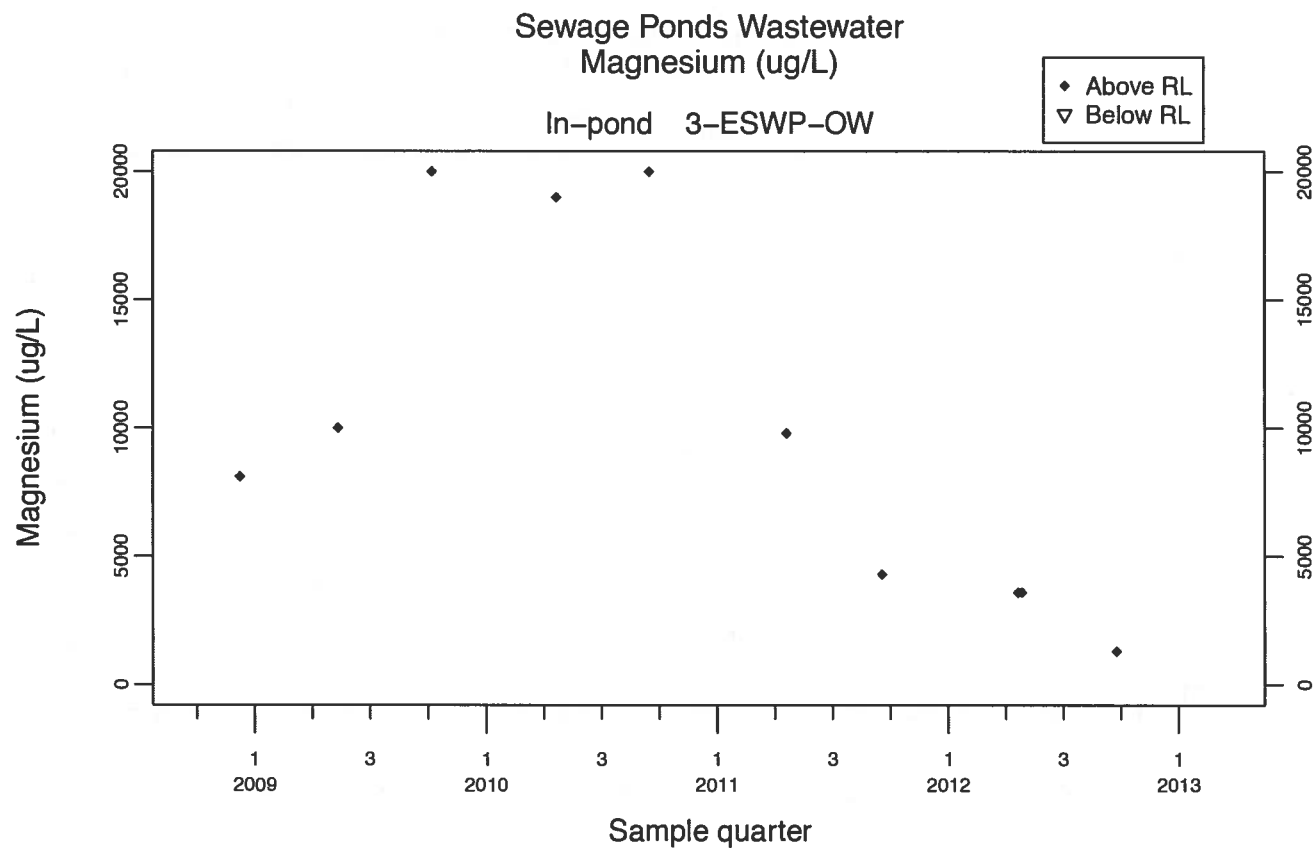


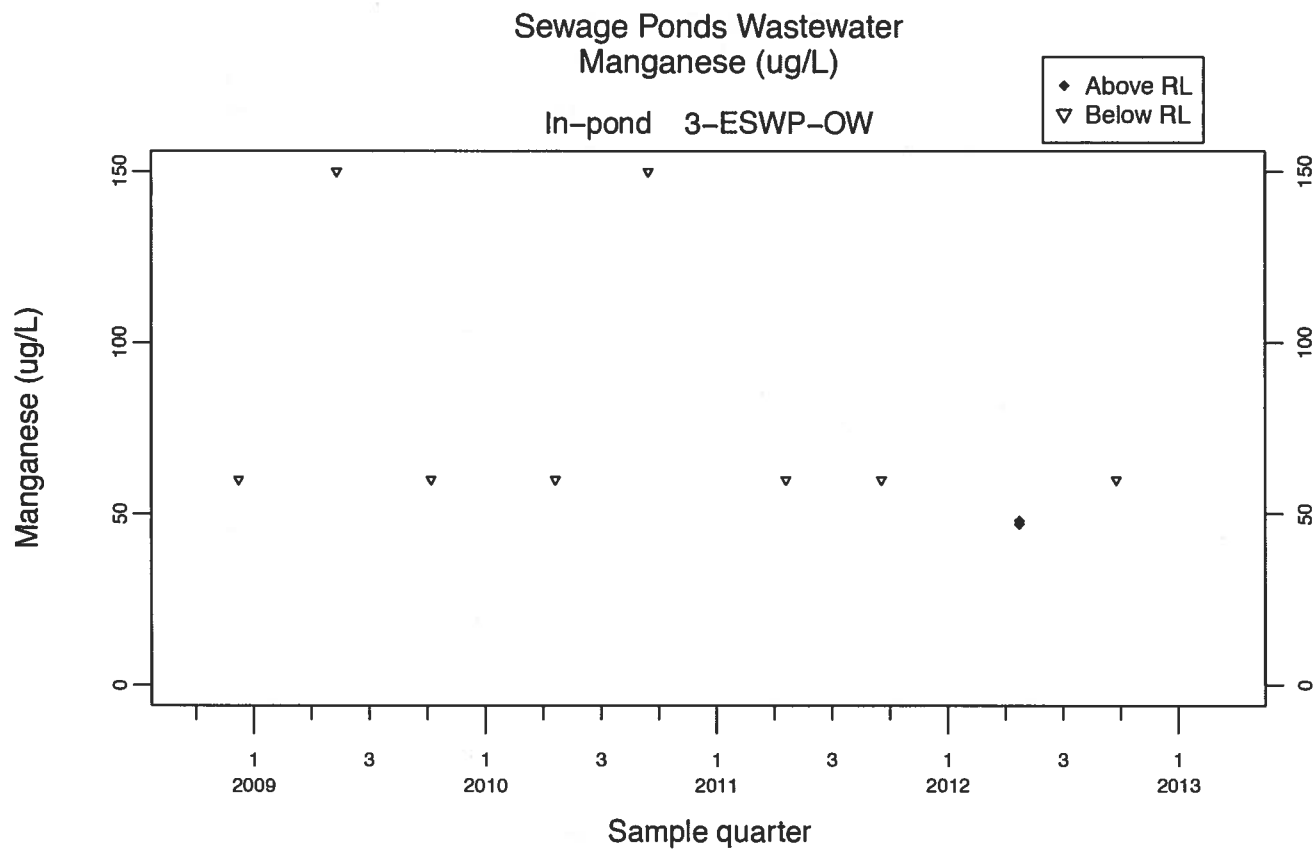


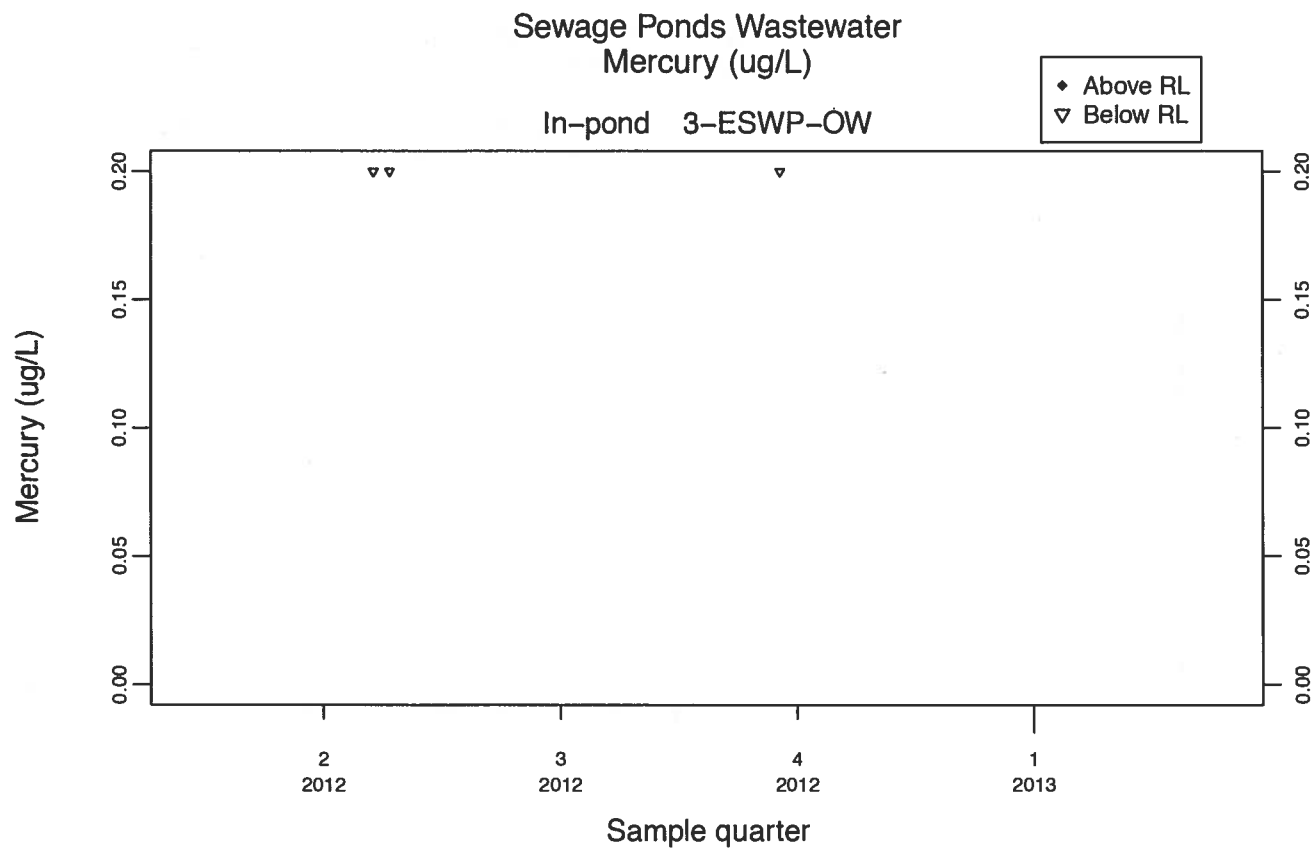


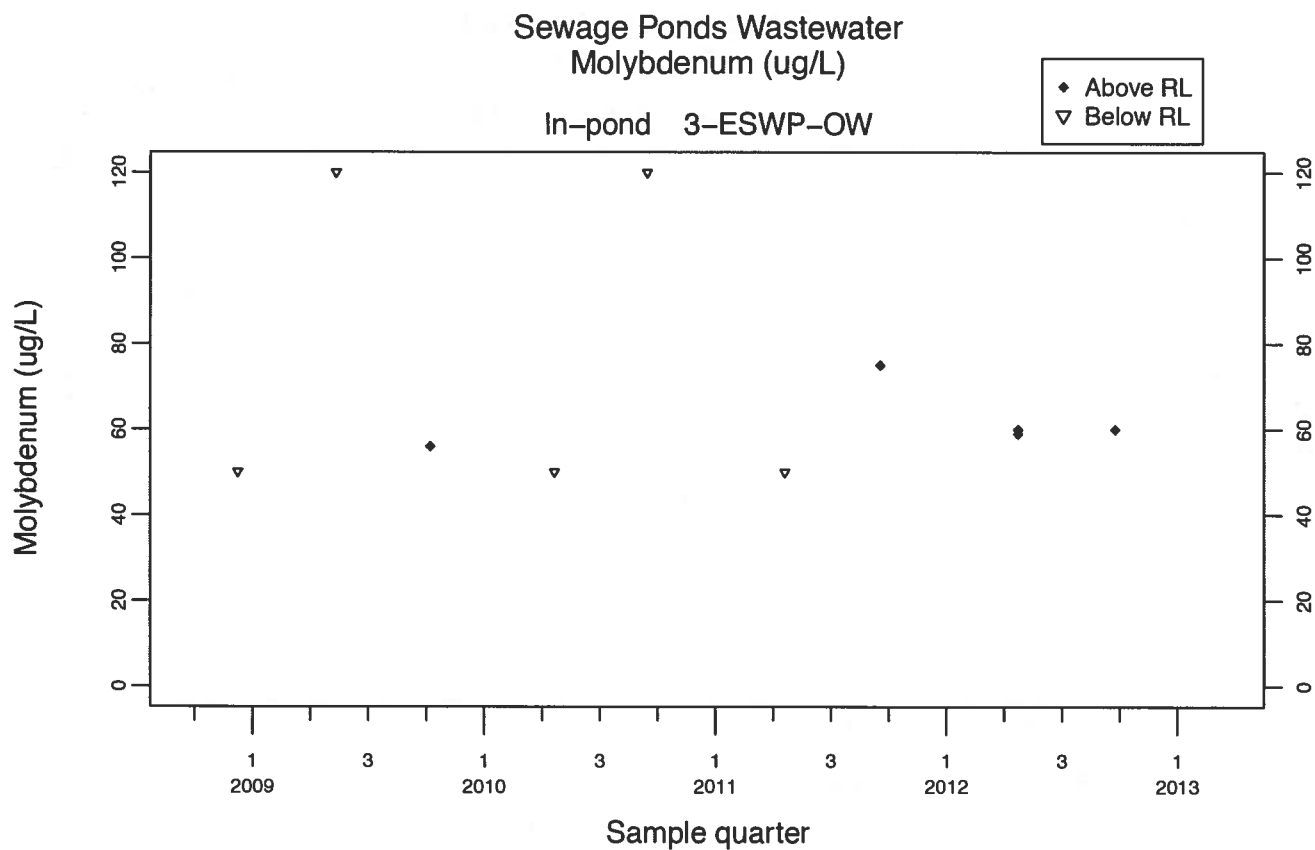


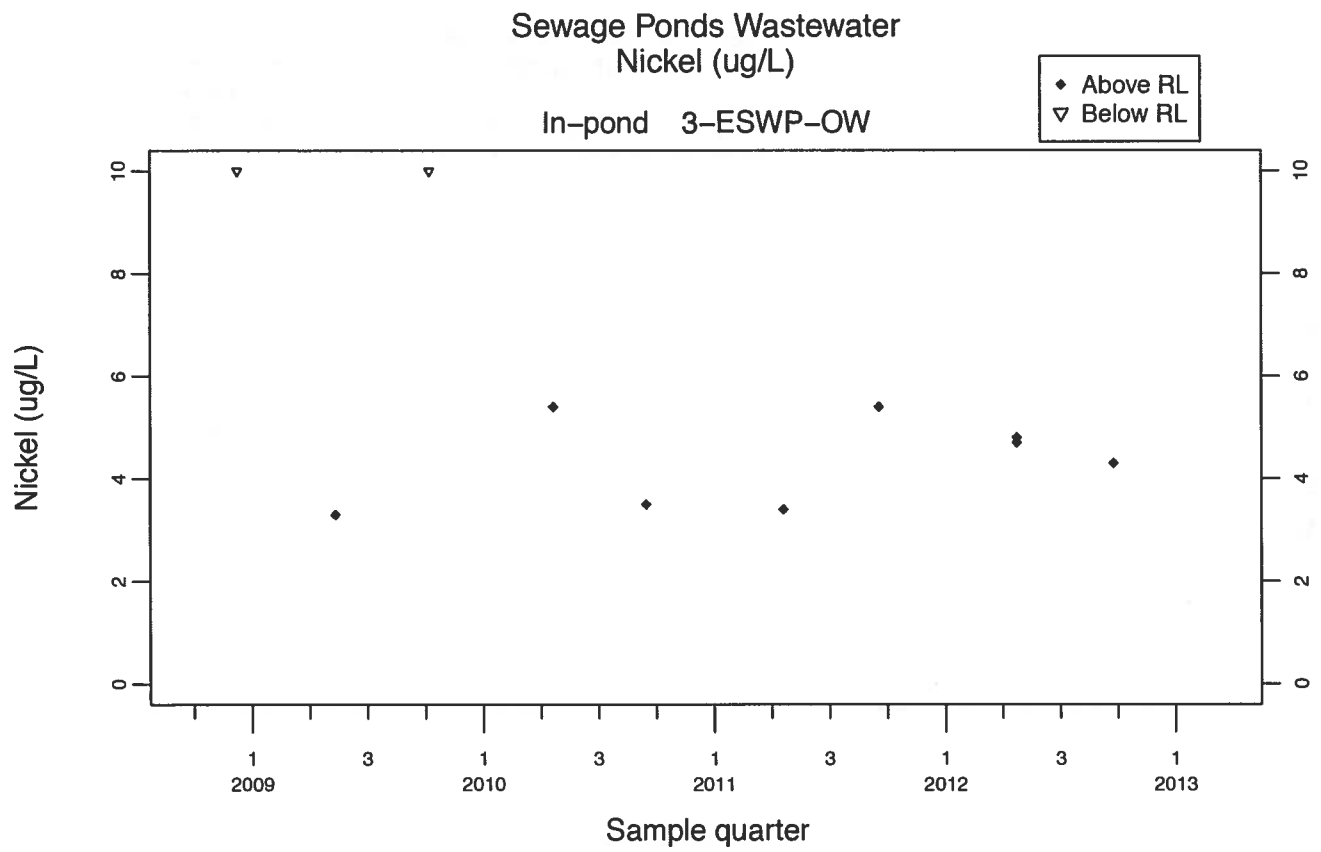


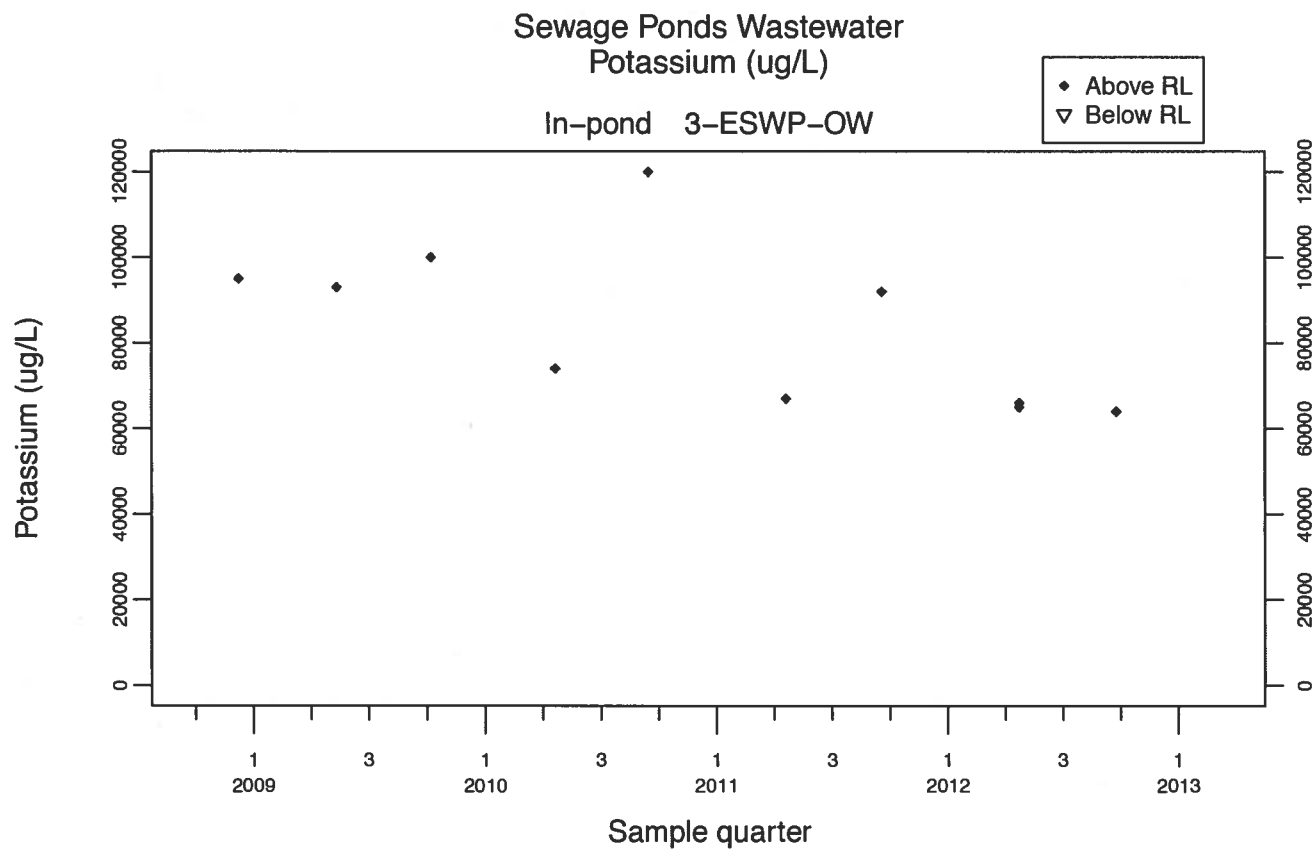


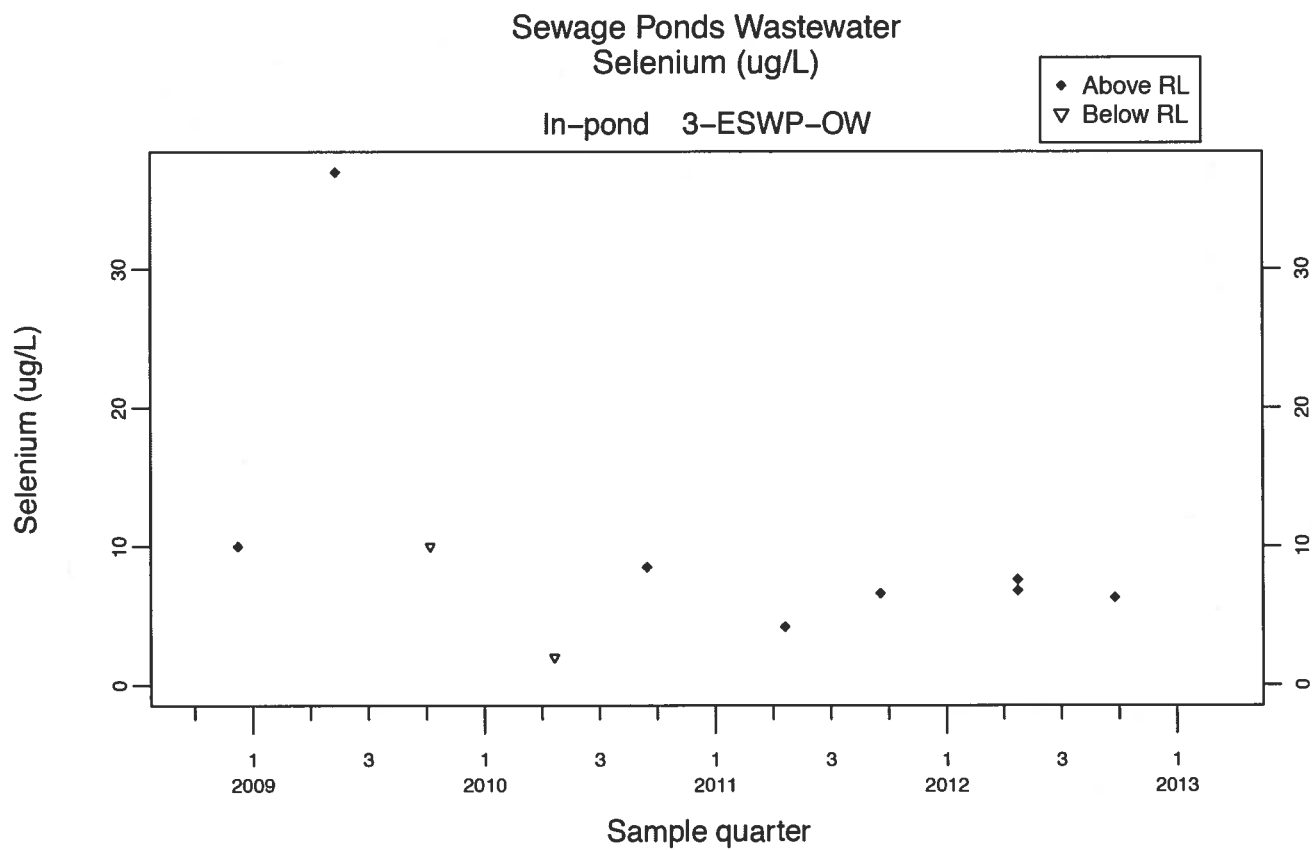


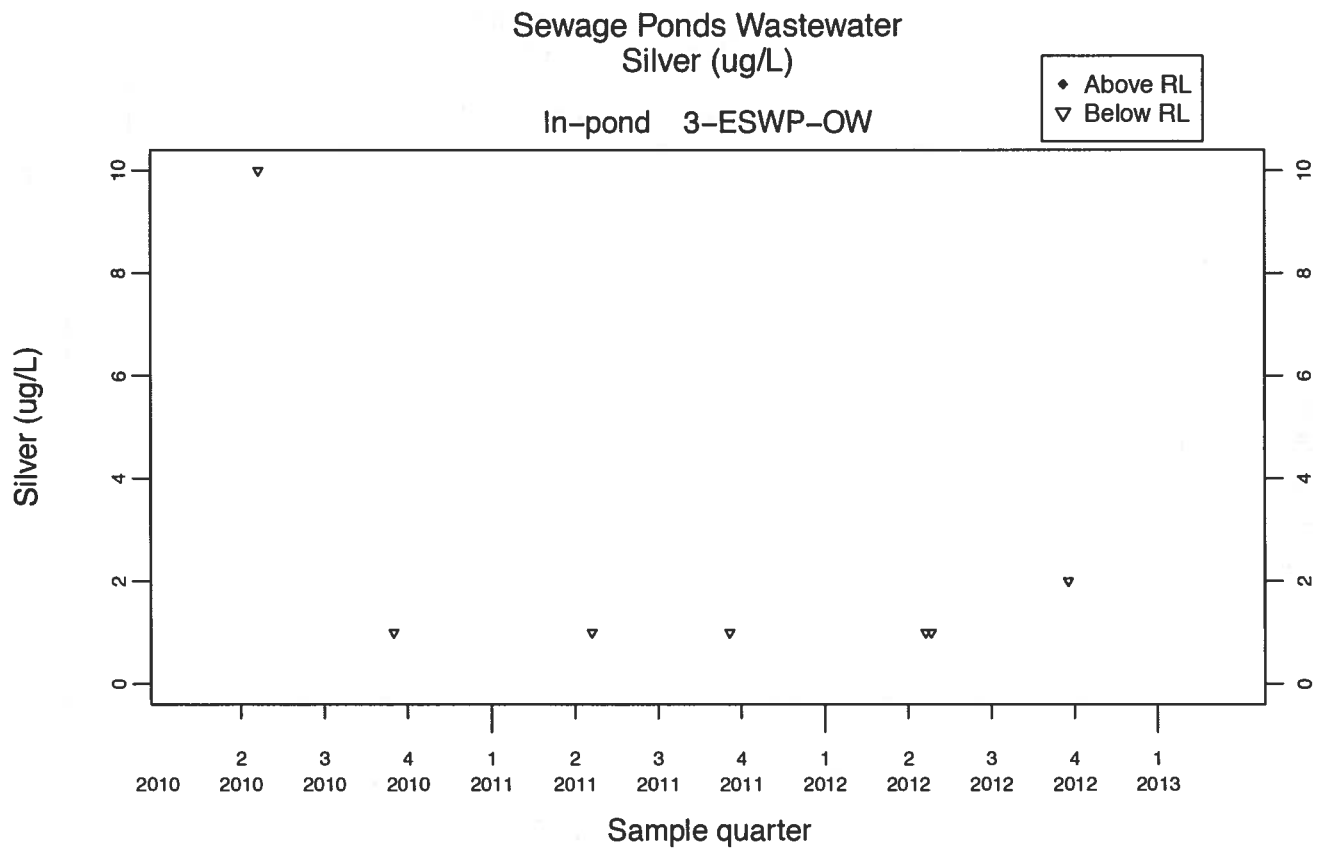




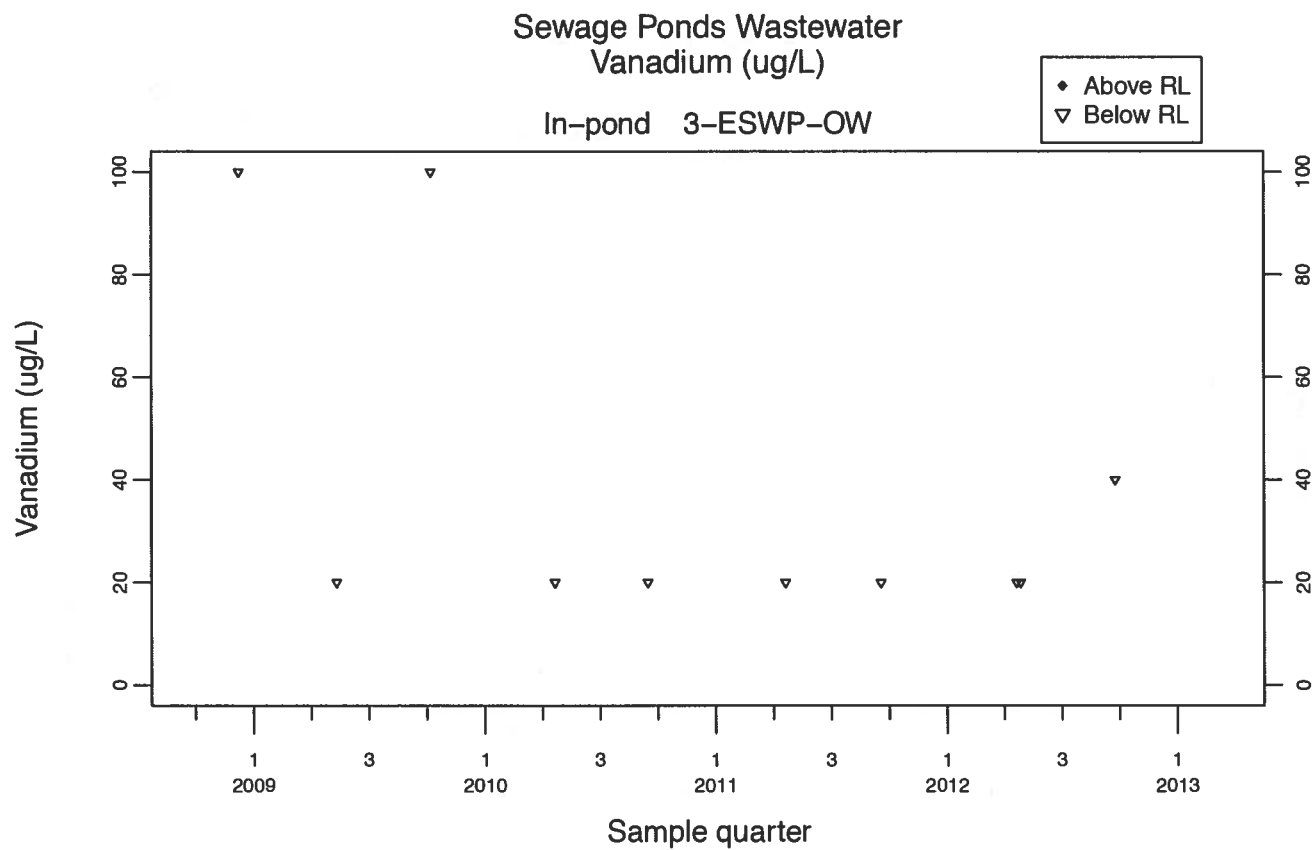


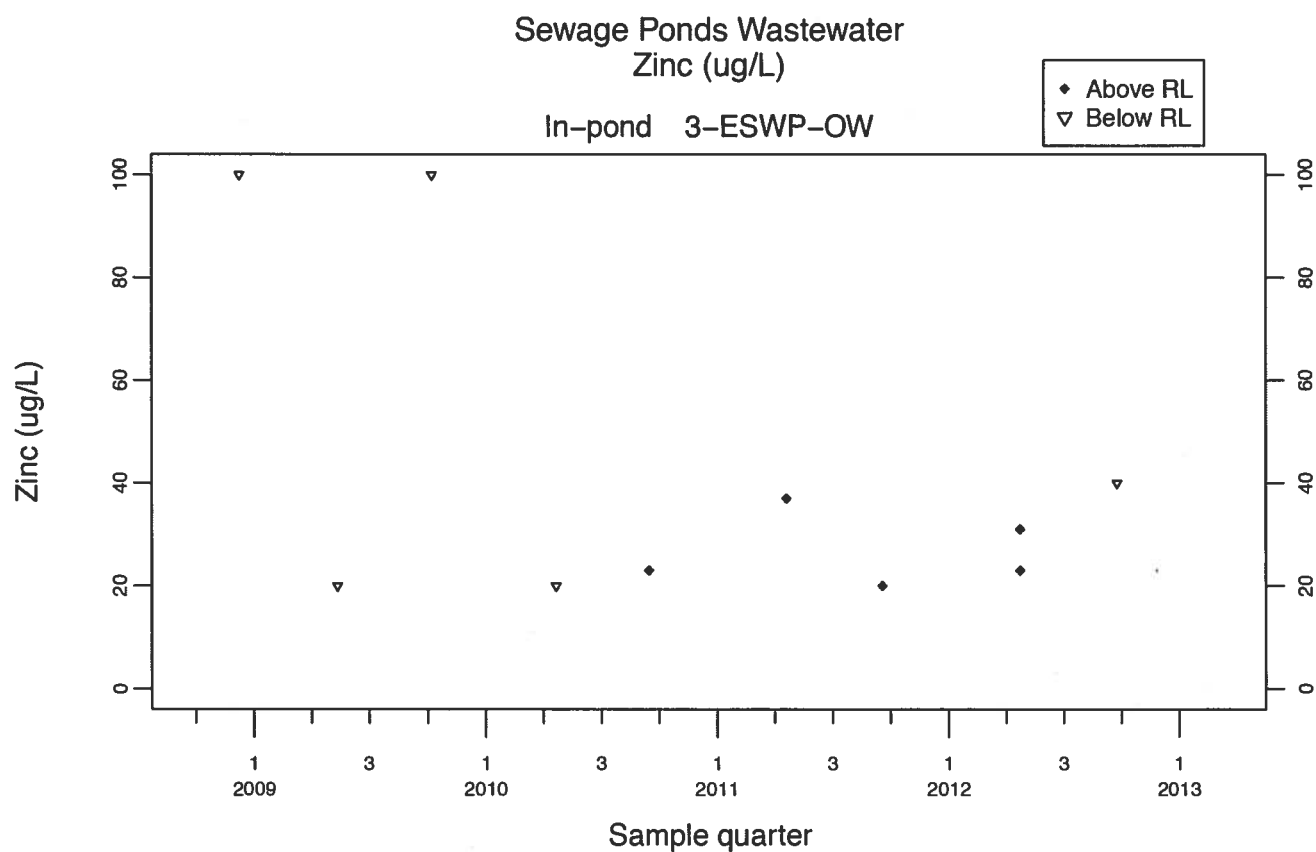


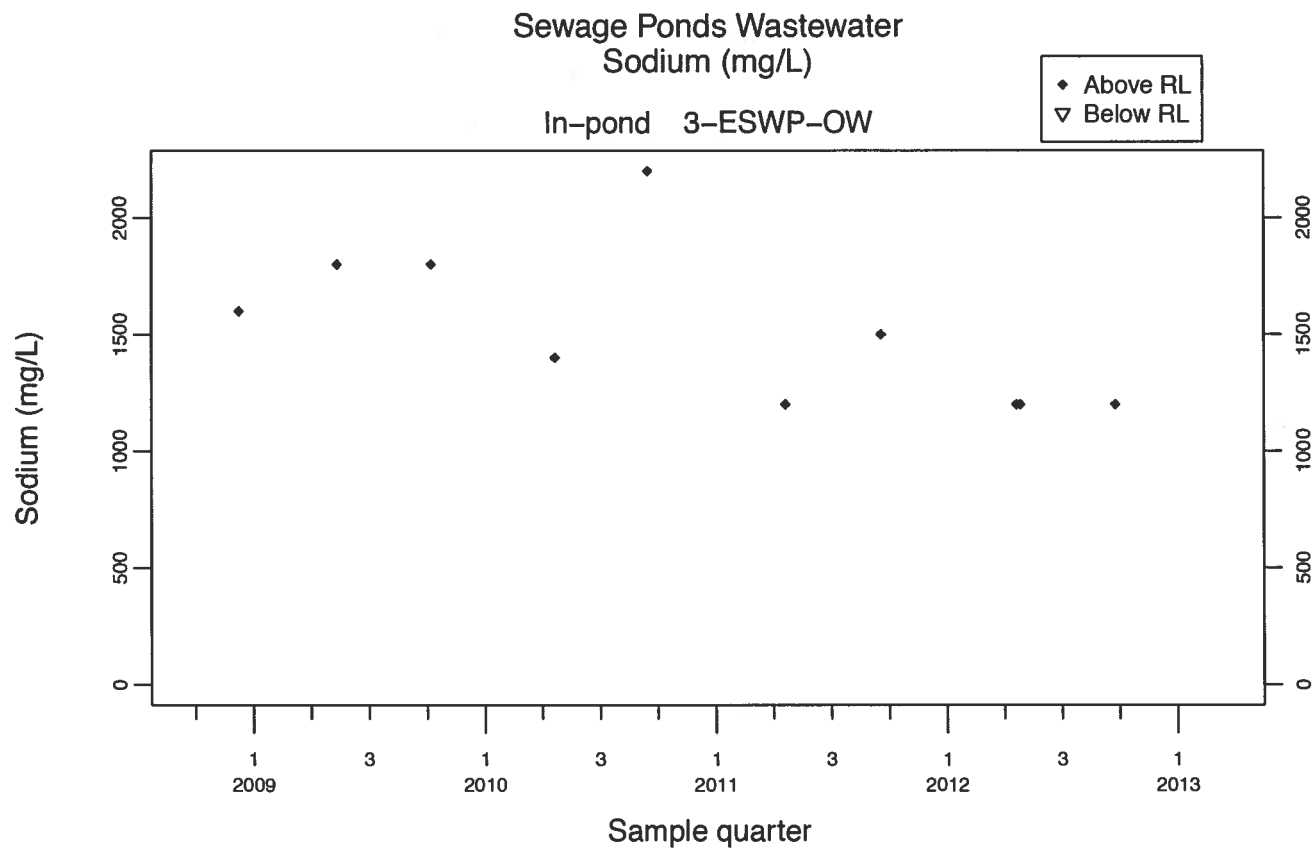






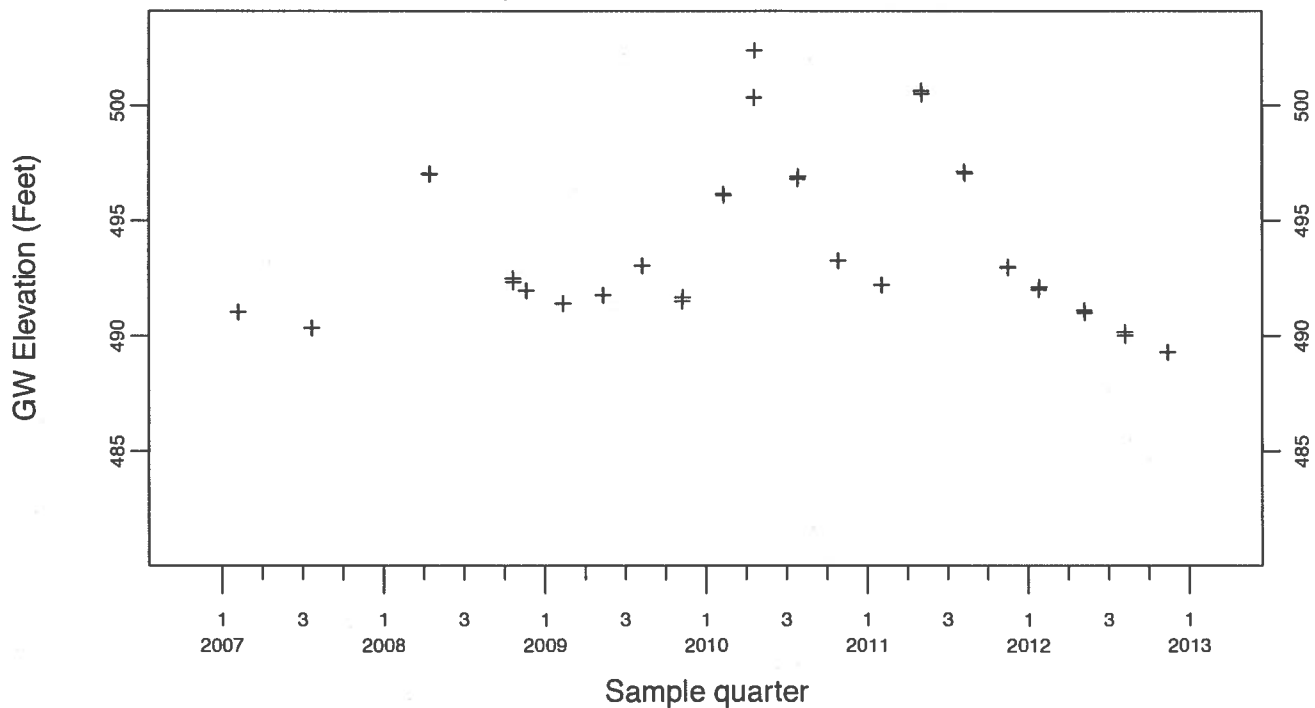




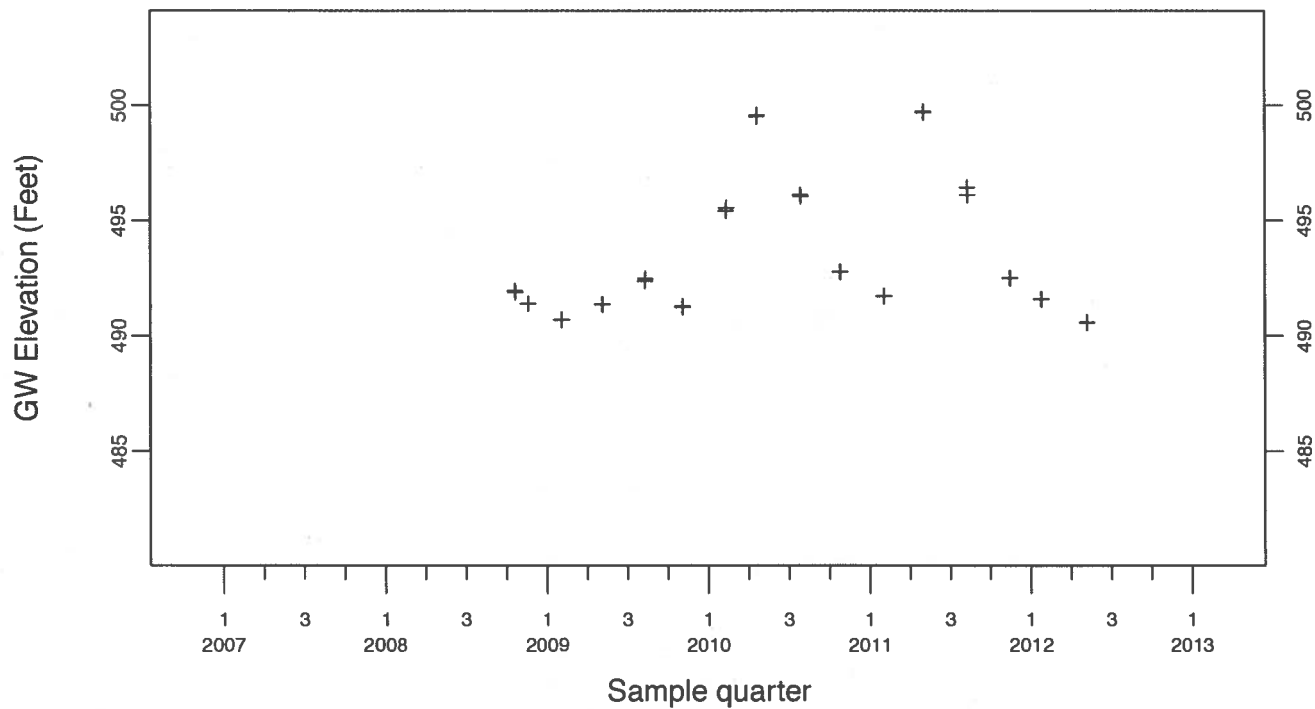


# Sewage Ponds Ground Water GW Elevation (Feet)

## Upgradient Monitor Well W-7ES

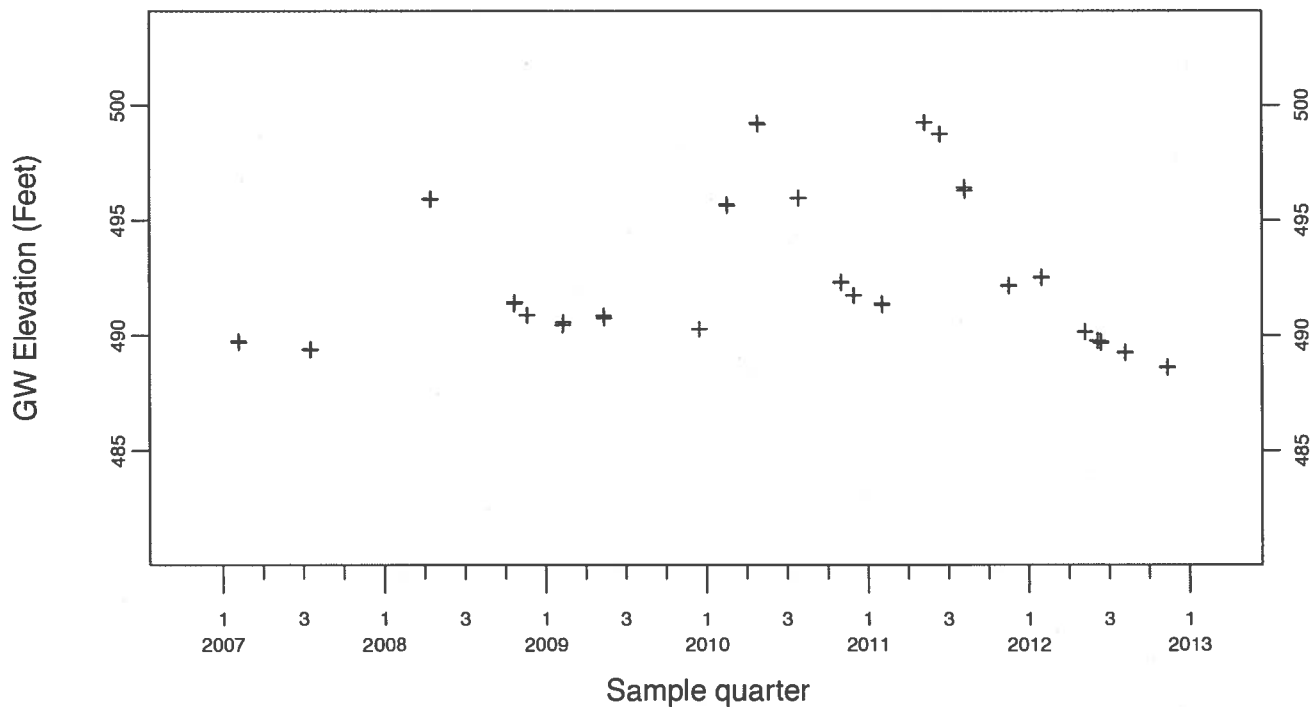


## Upgradient Monitor Well W-7PS

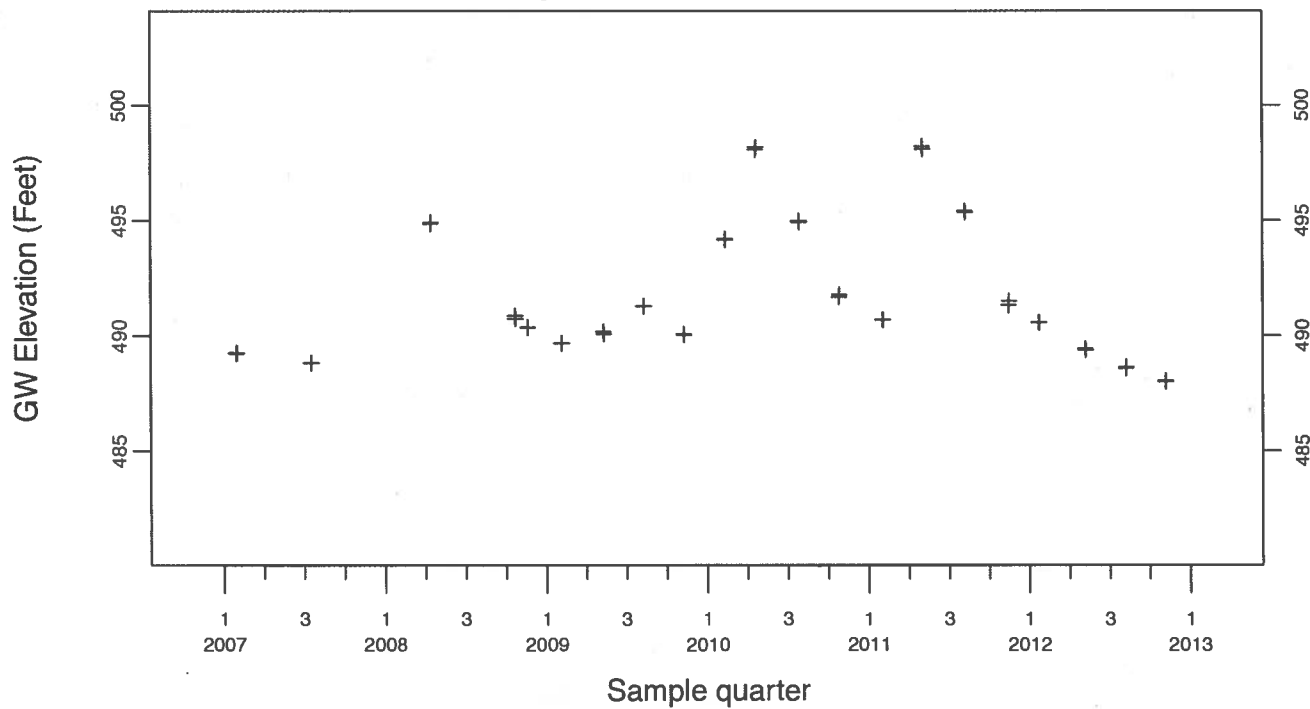


### Sewage Ponds Ground Water GW Elevation (Feet)

Crossgradient Monitor Well W-35A-04

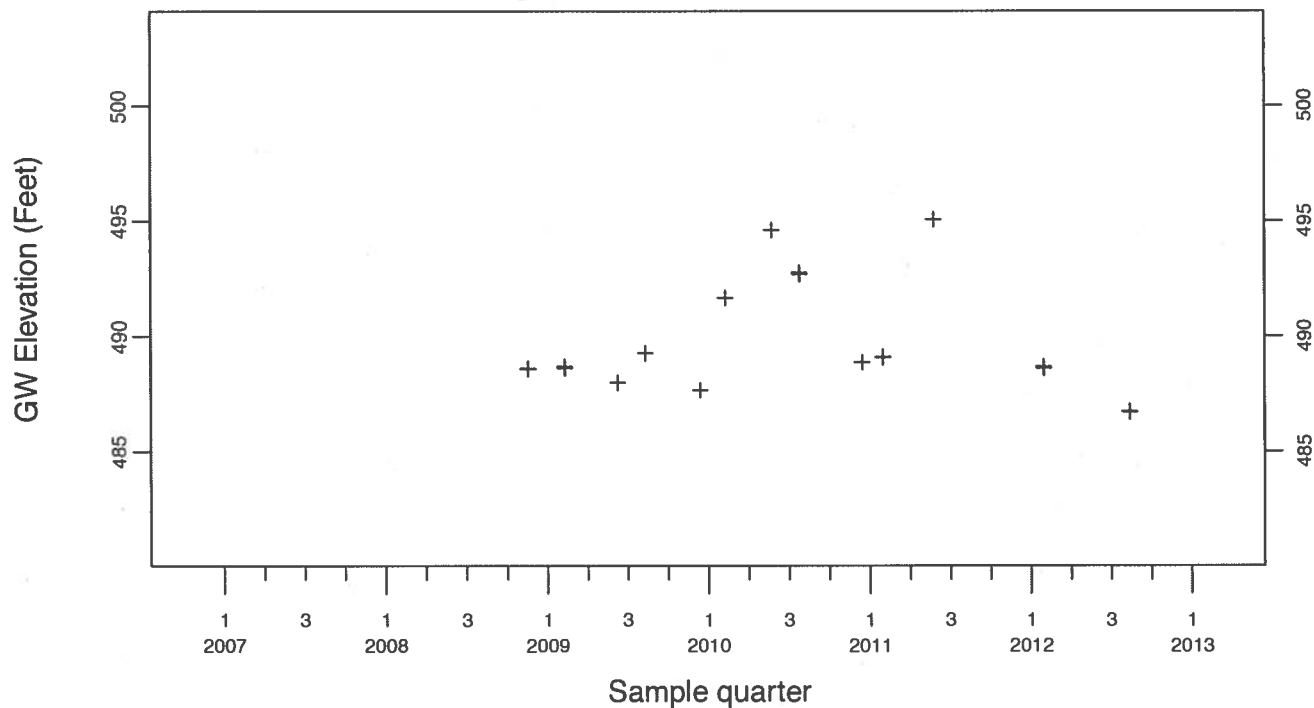


Downgradient Monitor Well W-7DS

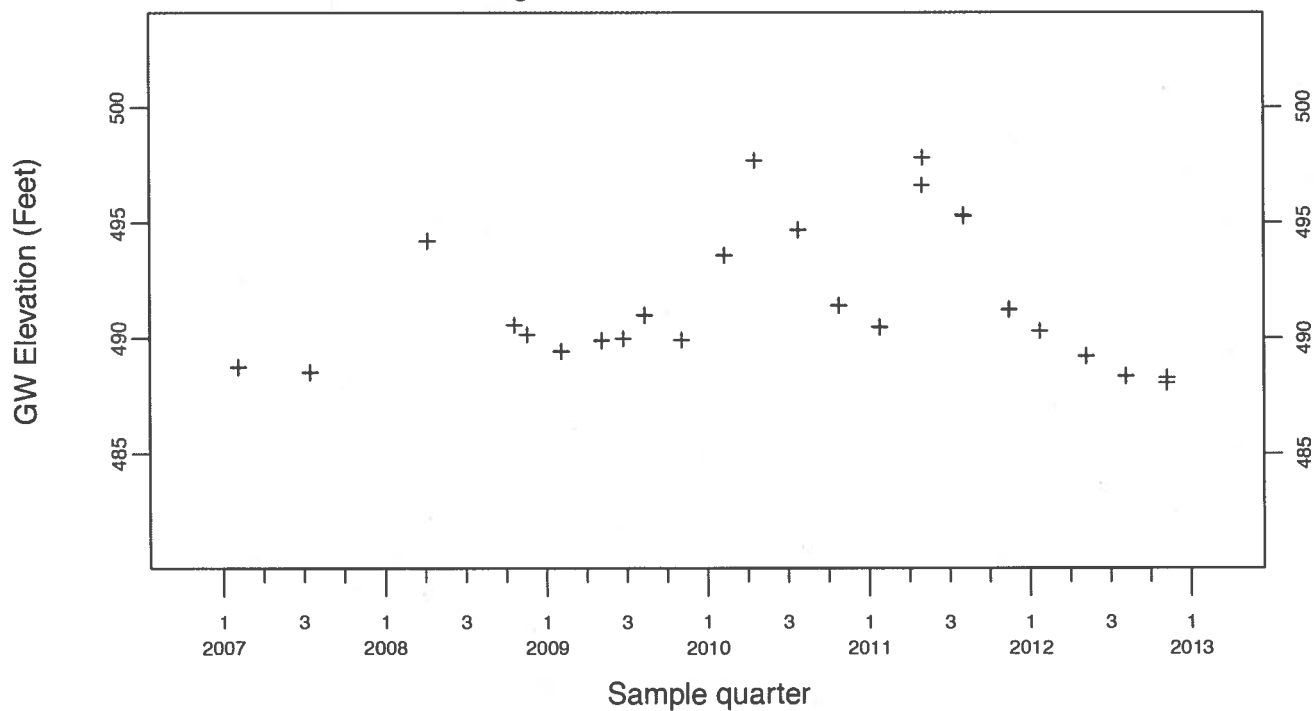


### Sewage Ponds Ground Water GW Elevation (Feet)

Downgradient Monitor Well W-25N-23

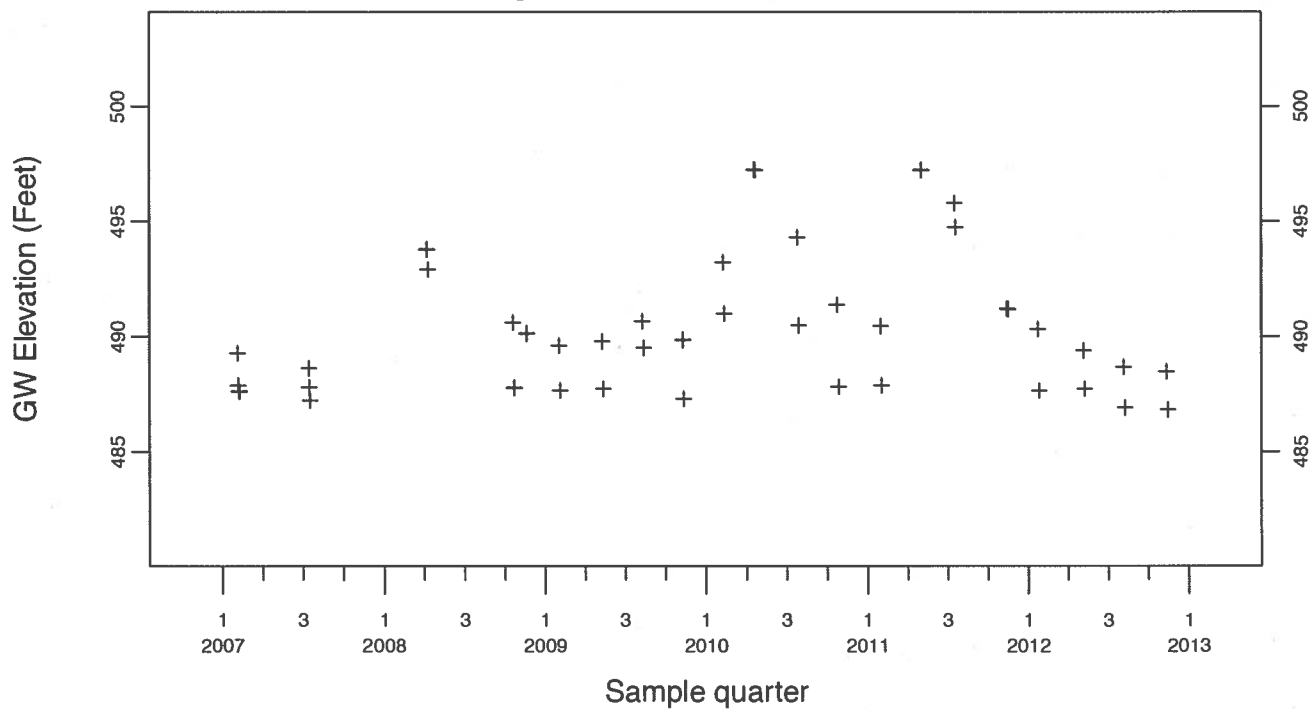


Downgradient Monitor Well W-26R-01

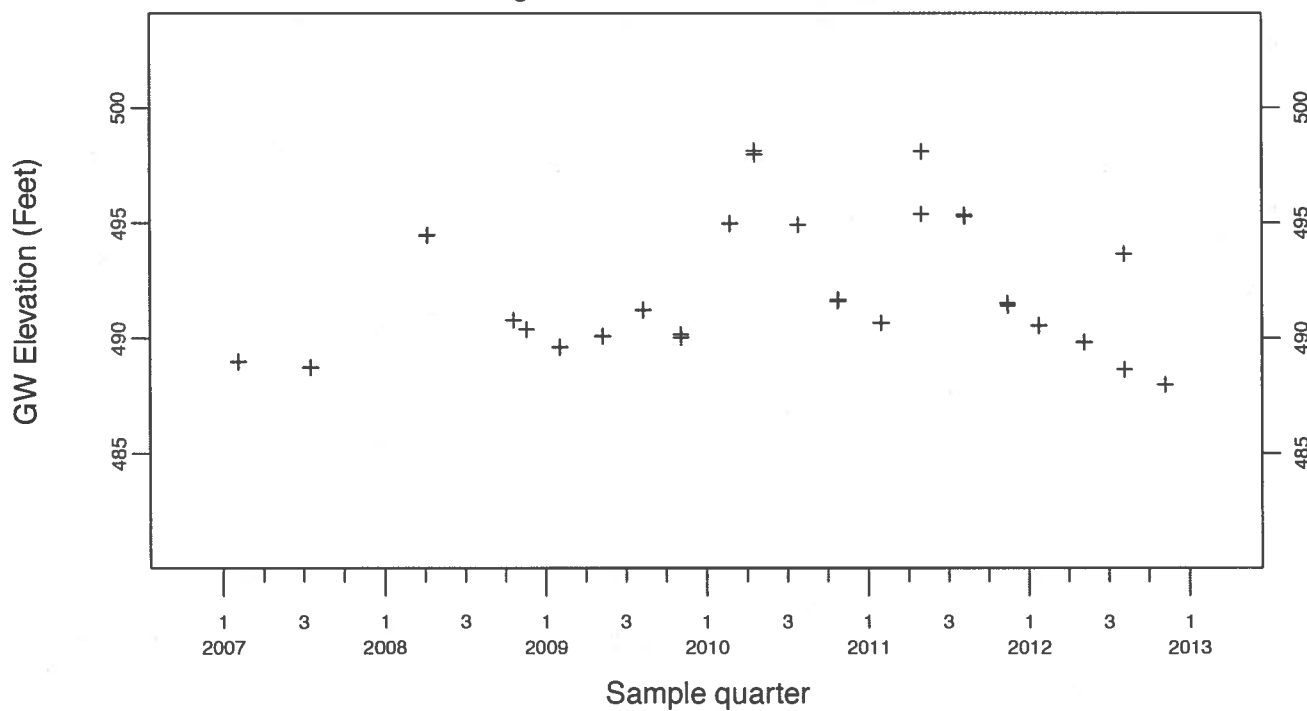


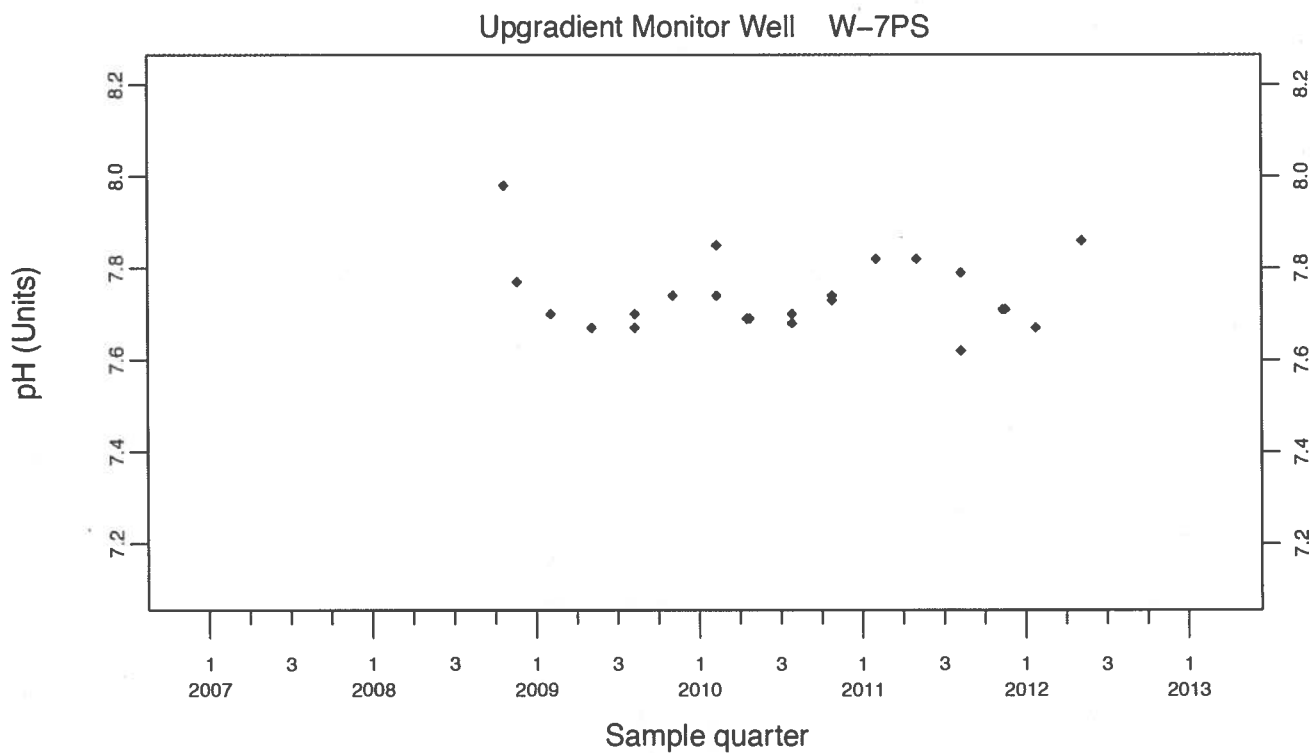
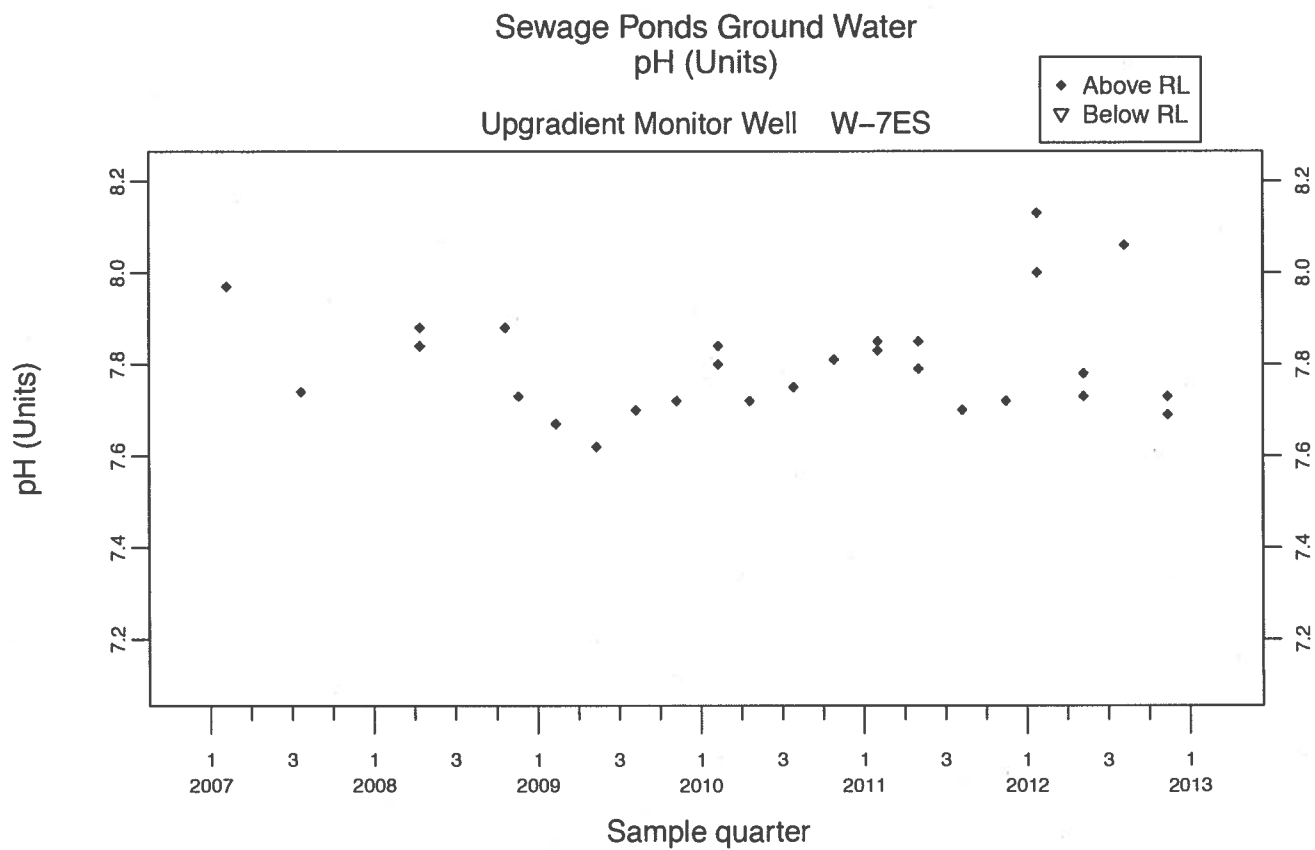
# Sewage Ponds Ground Water GW Elevation (Feet)

Downgradient Monitor Well W-26R-05

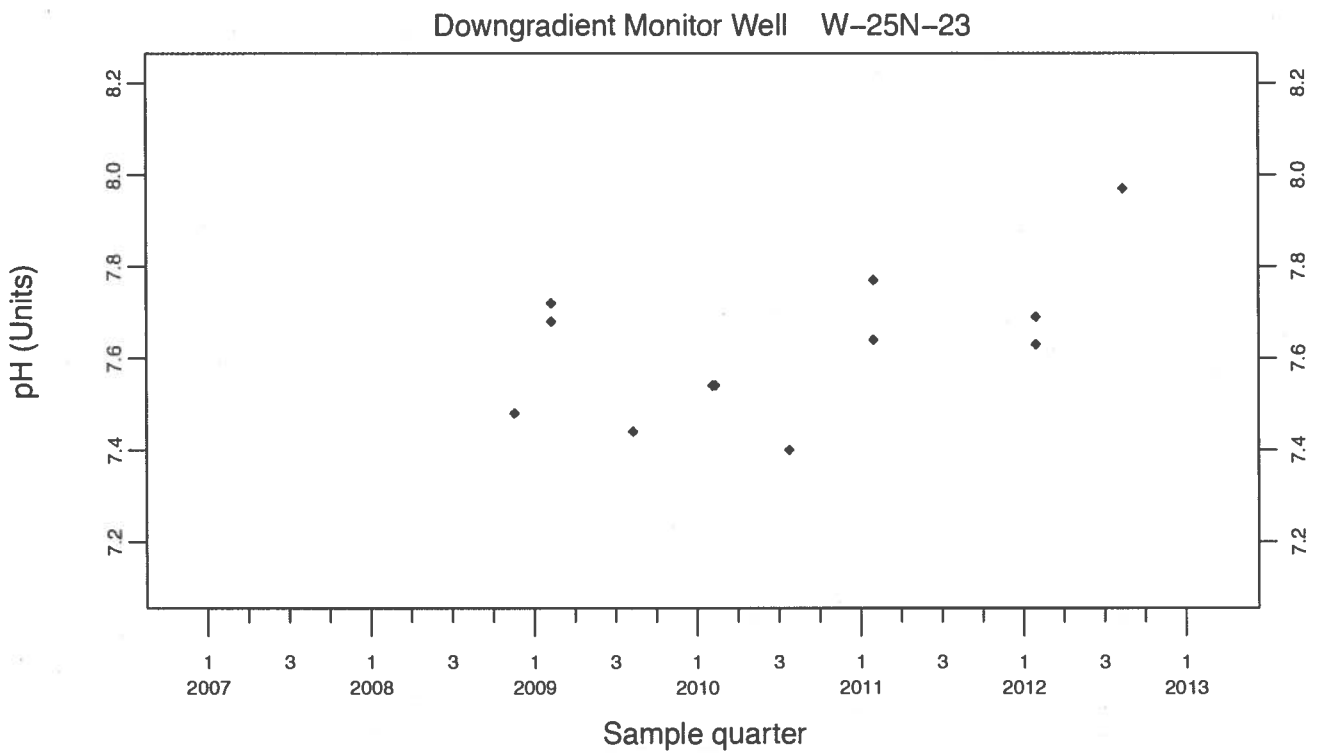
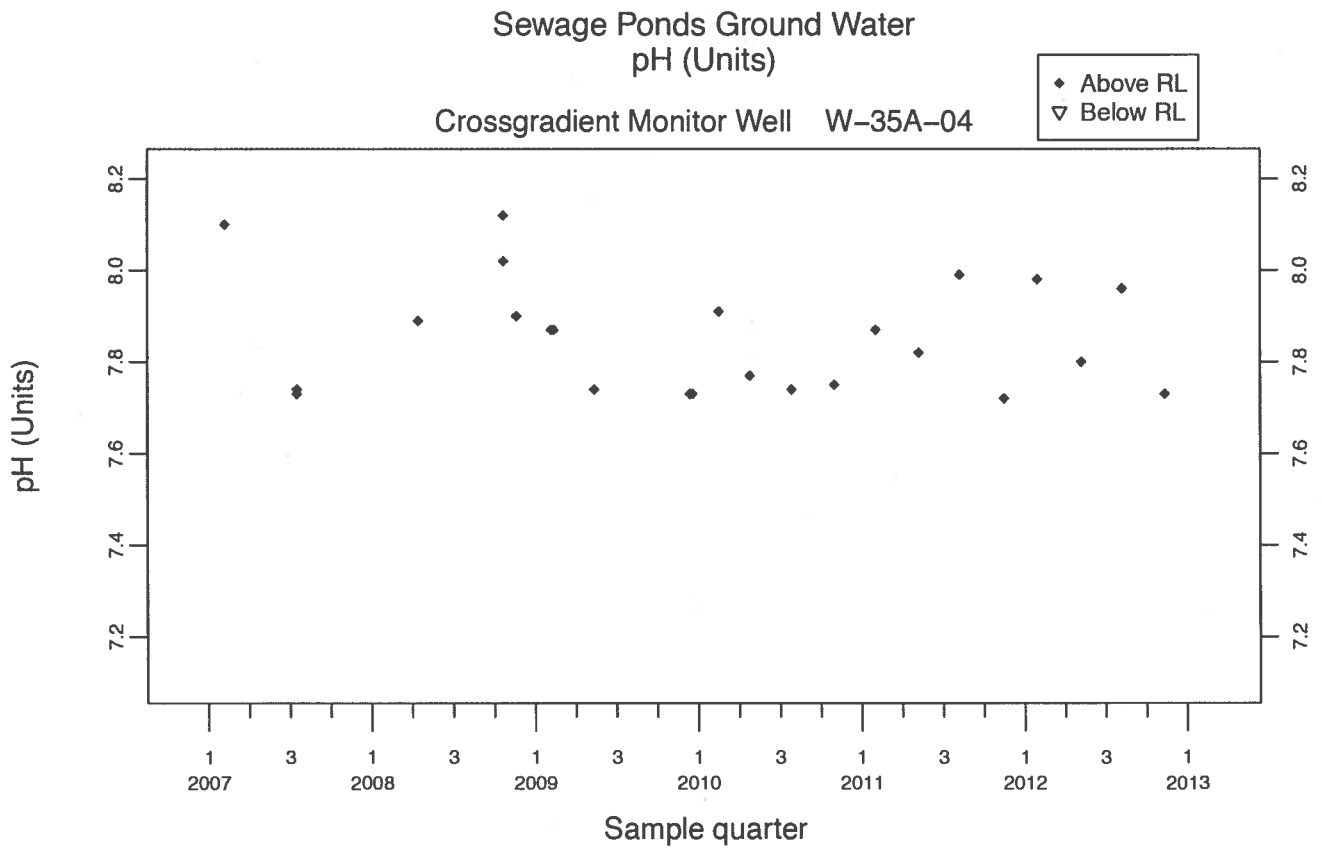


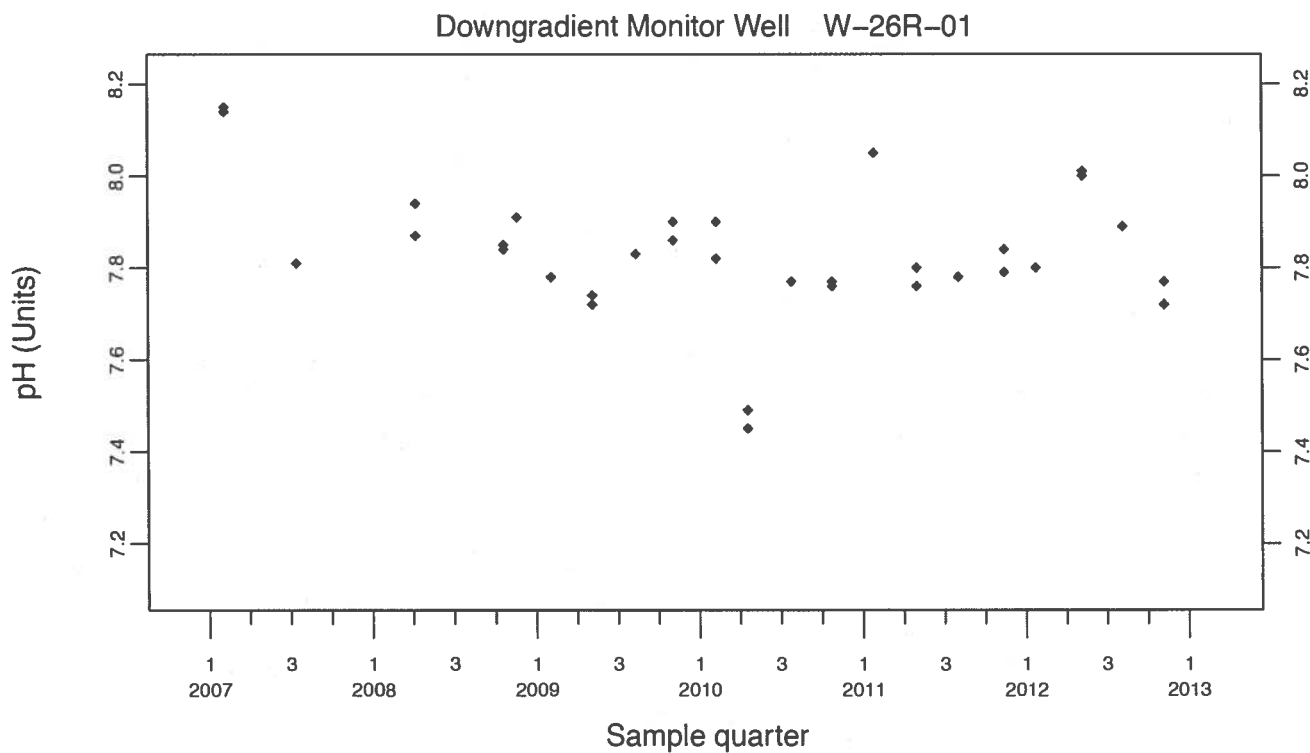
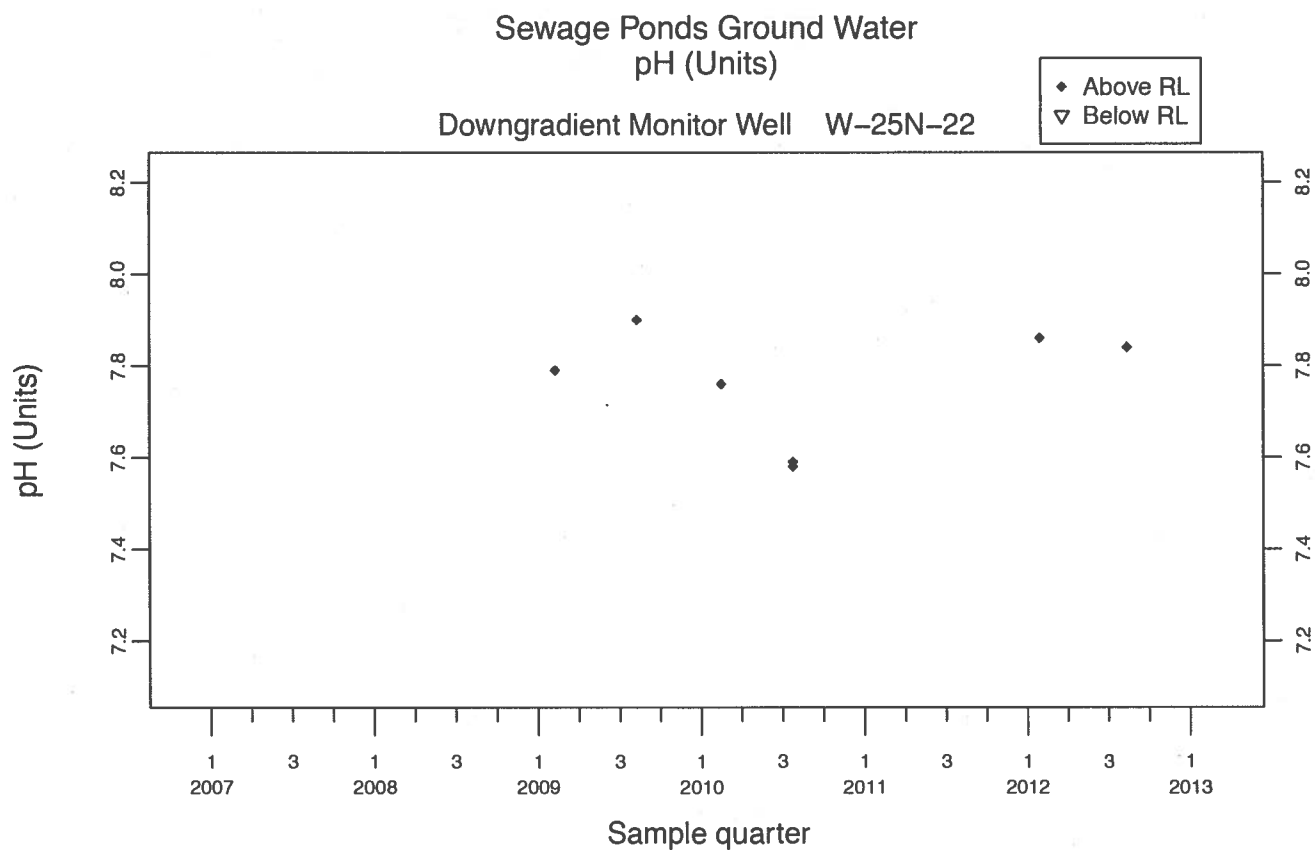
Downgradient Monitor Well W-26R-11

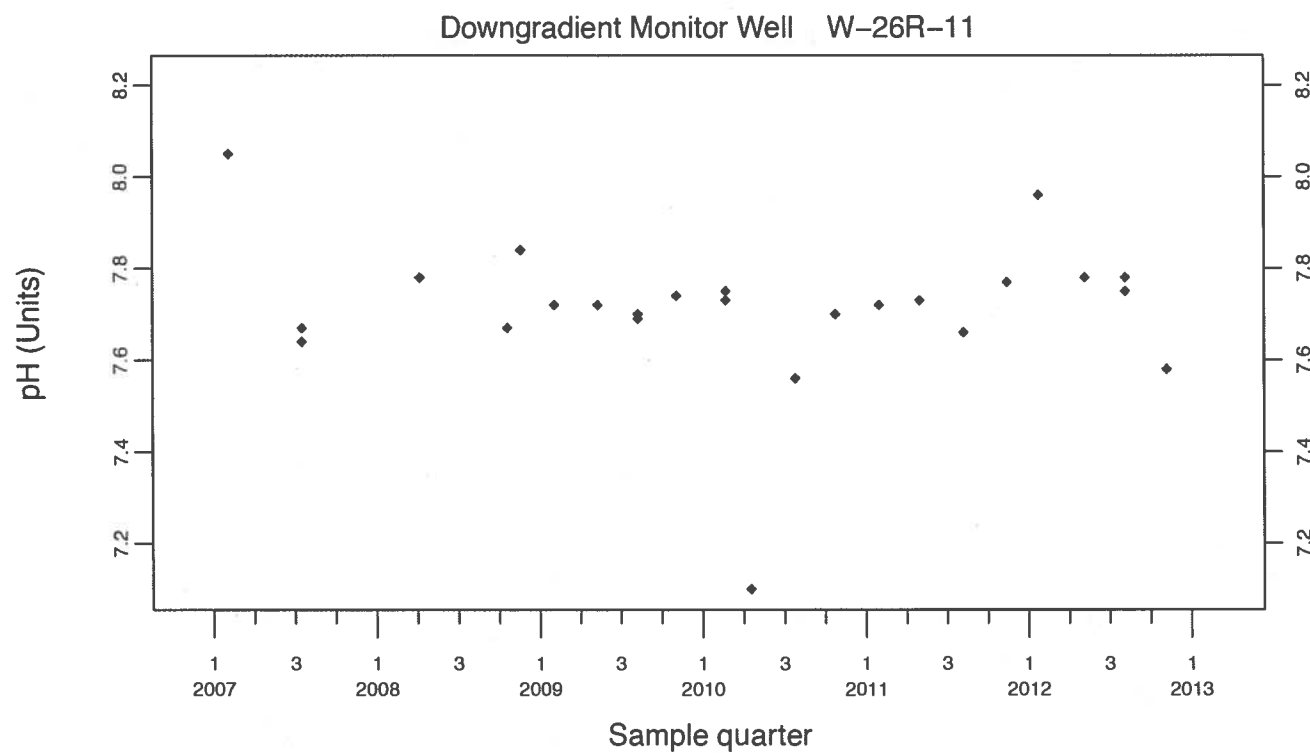
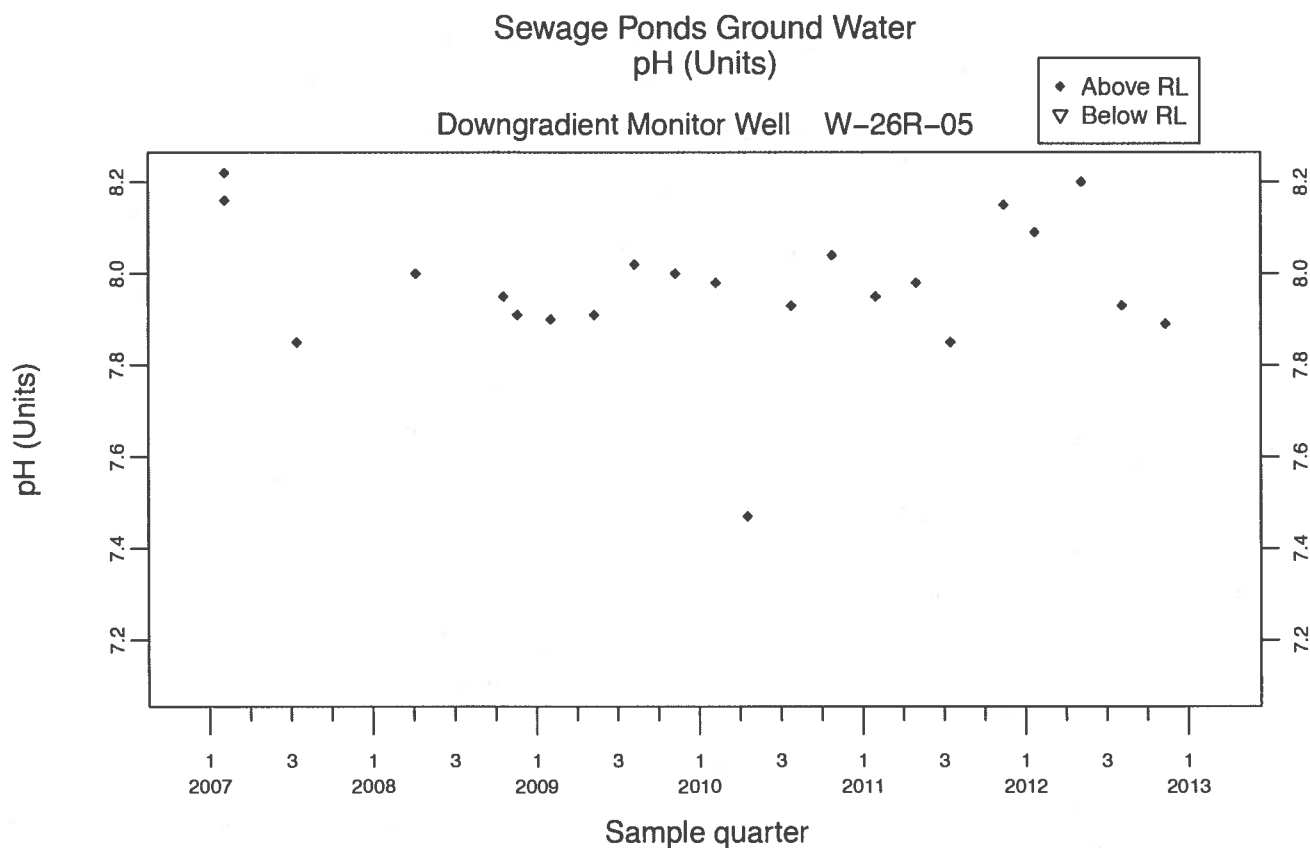


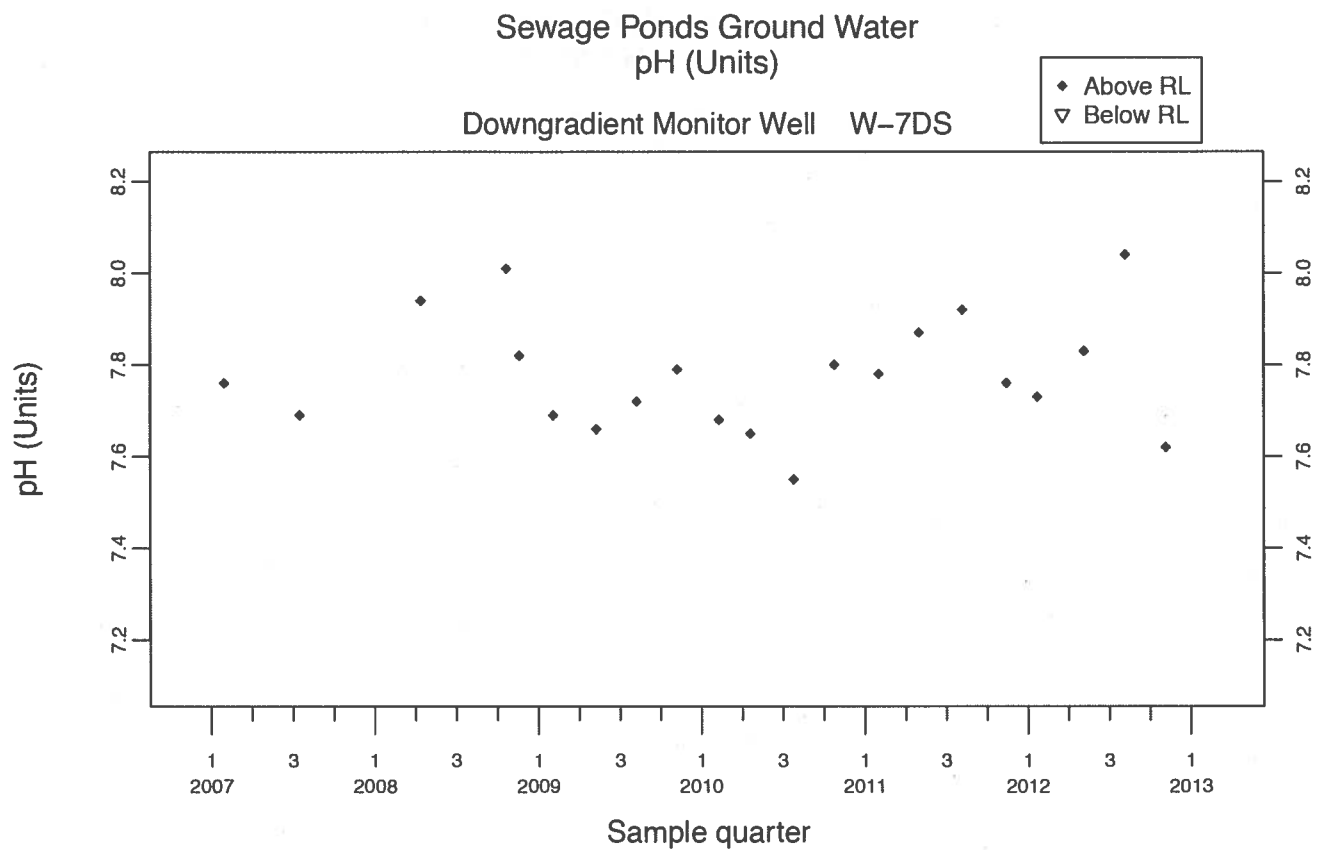


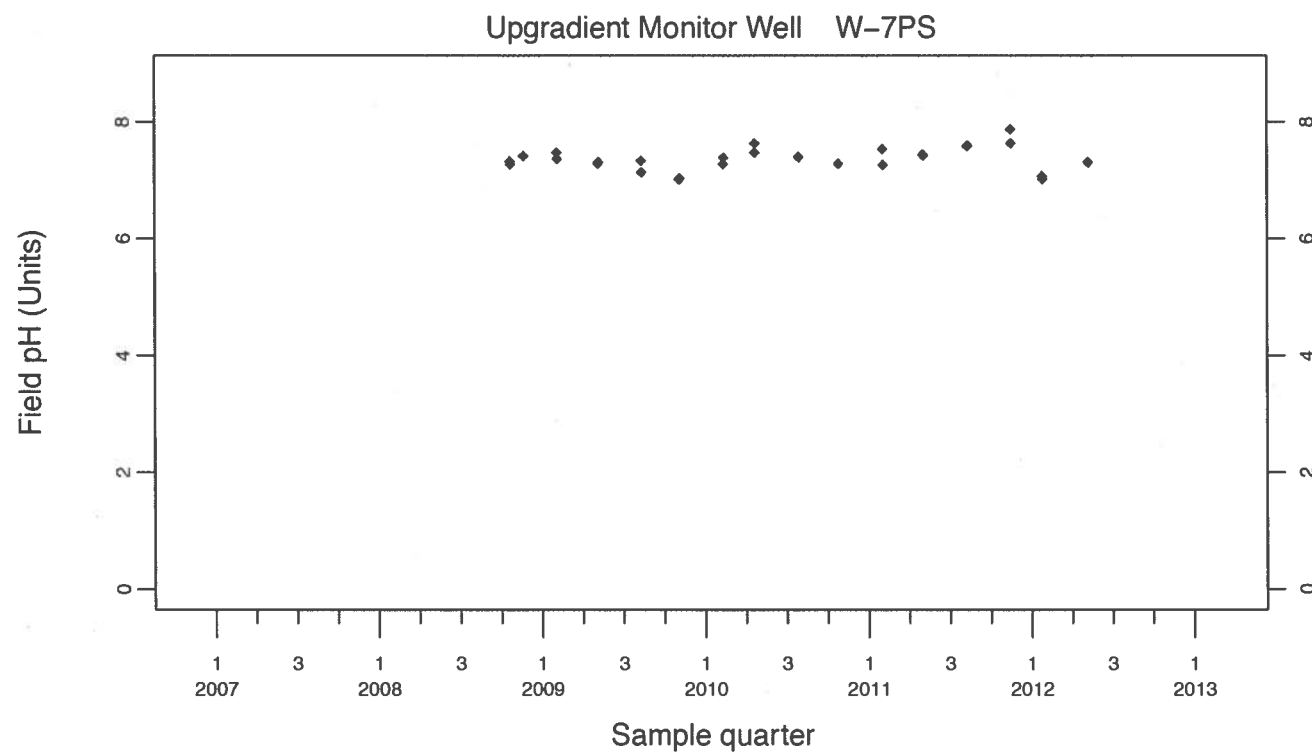
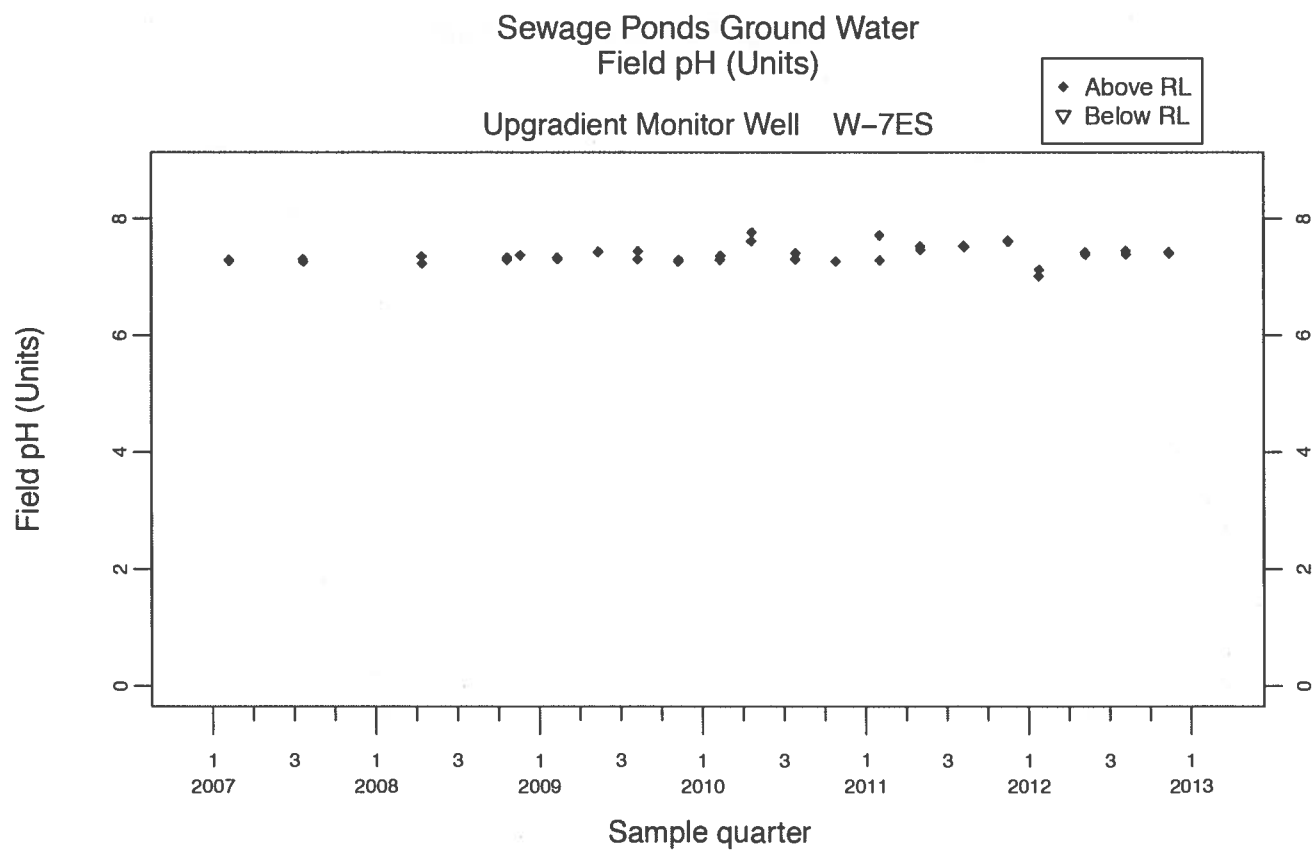


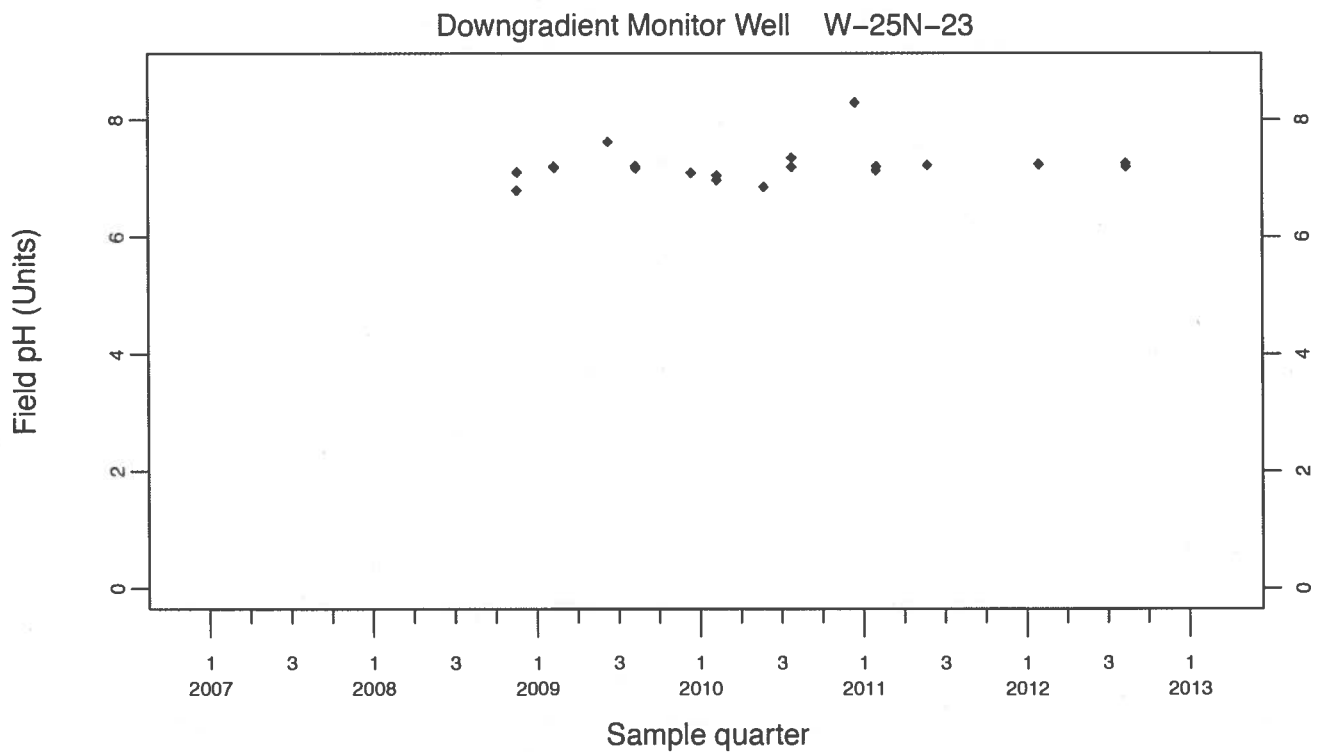
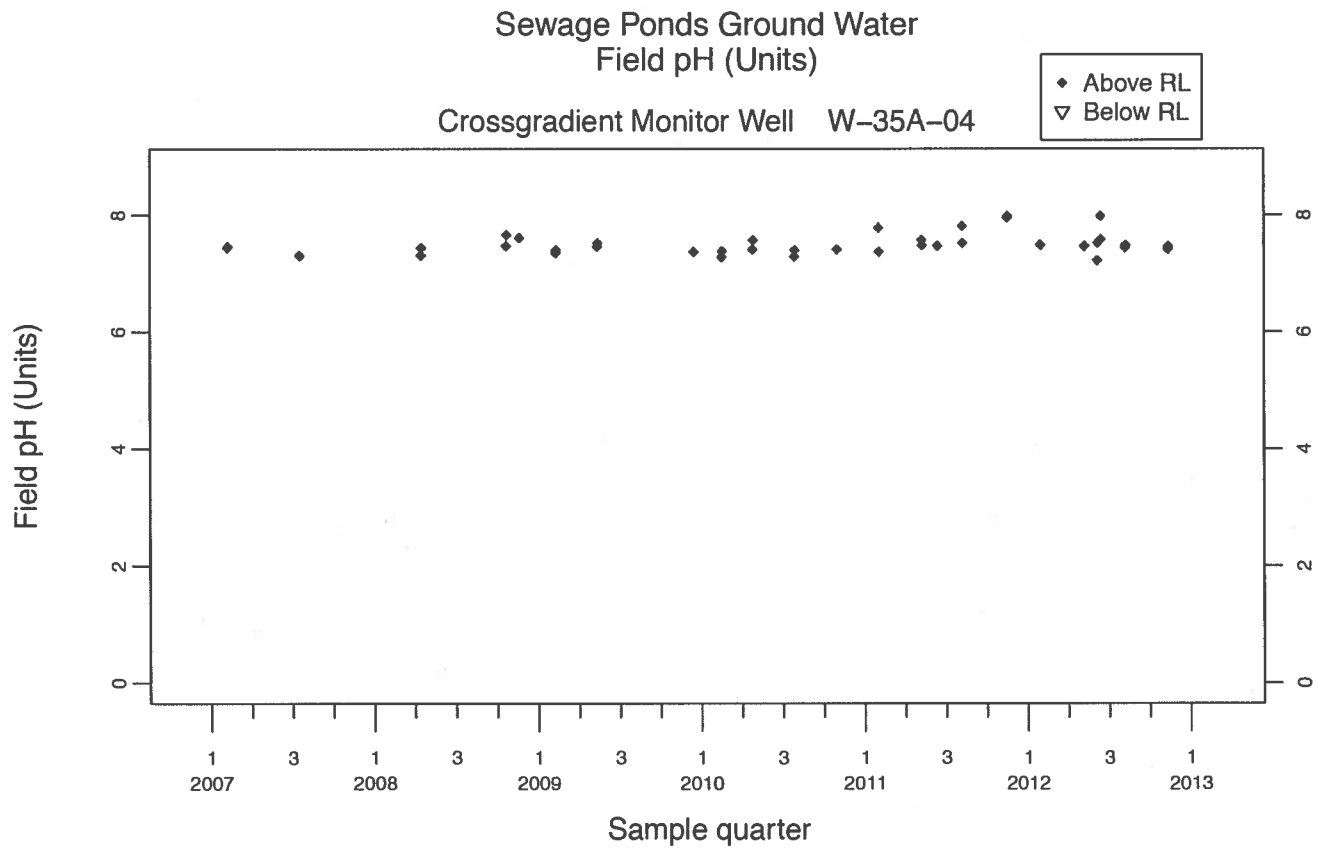


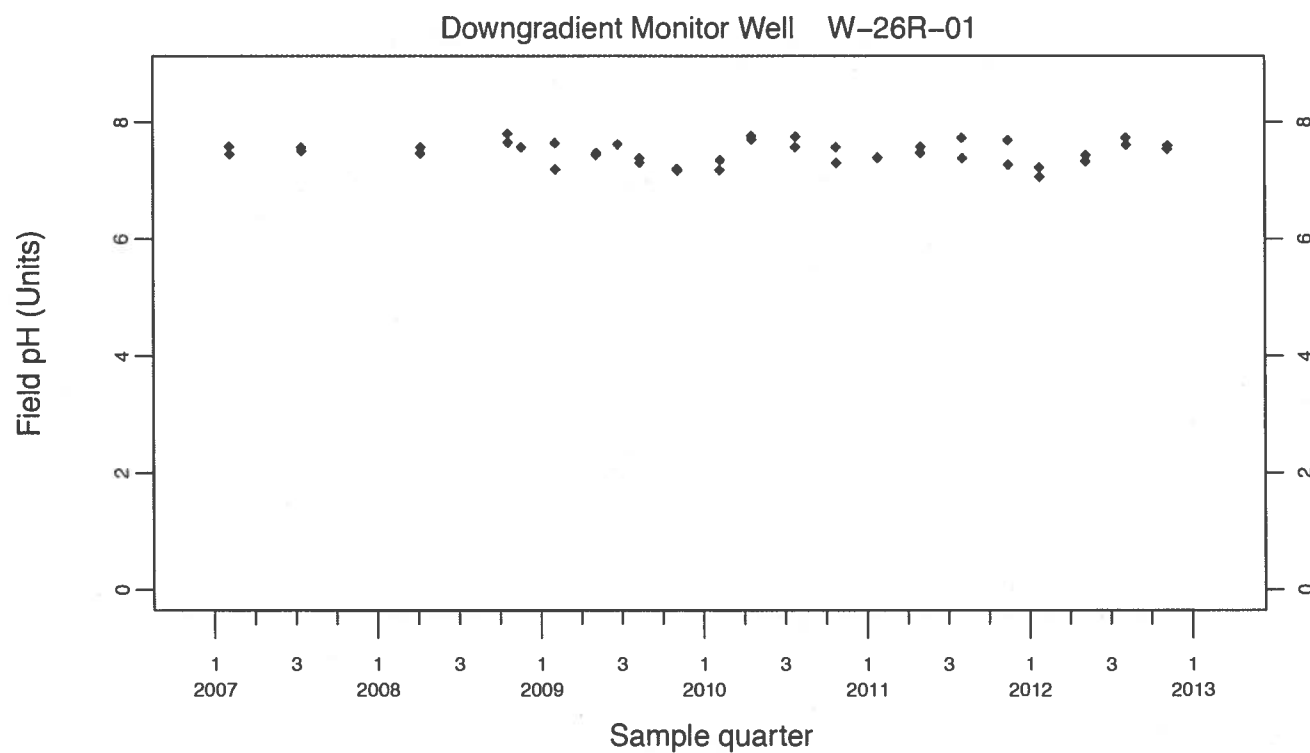
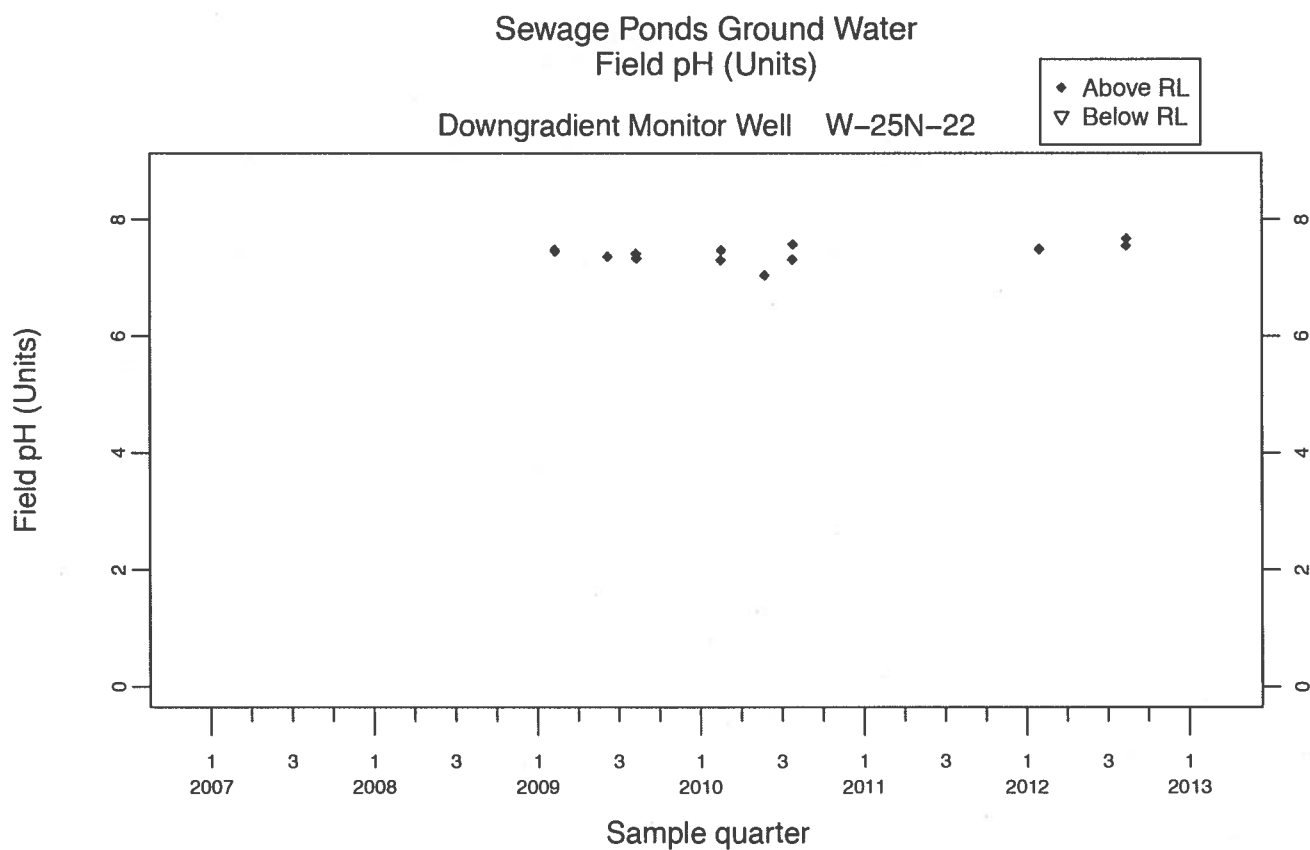


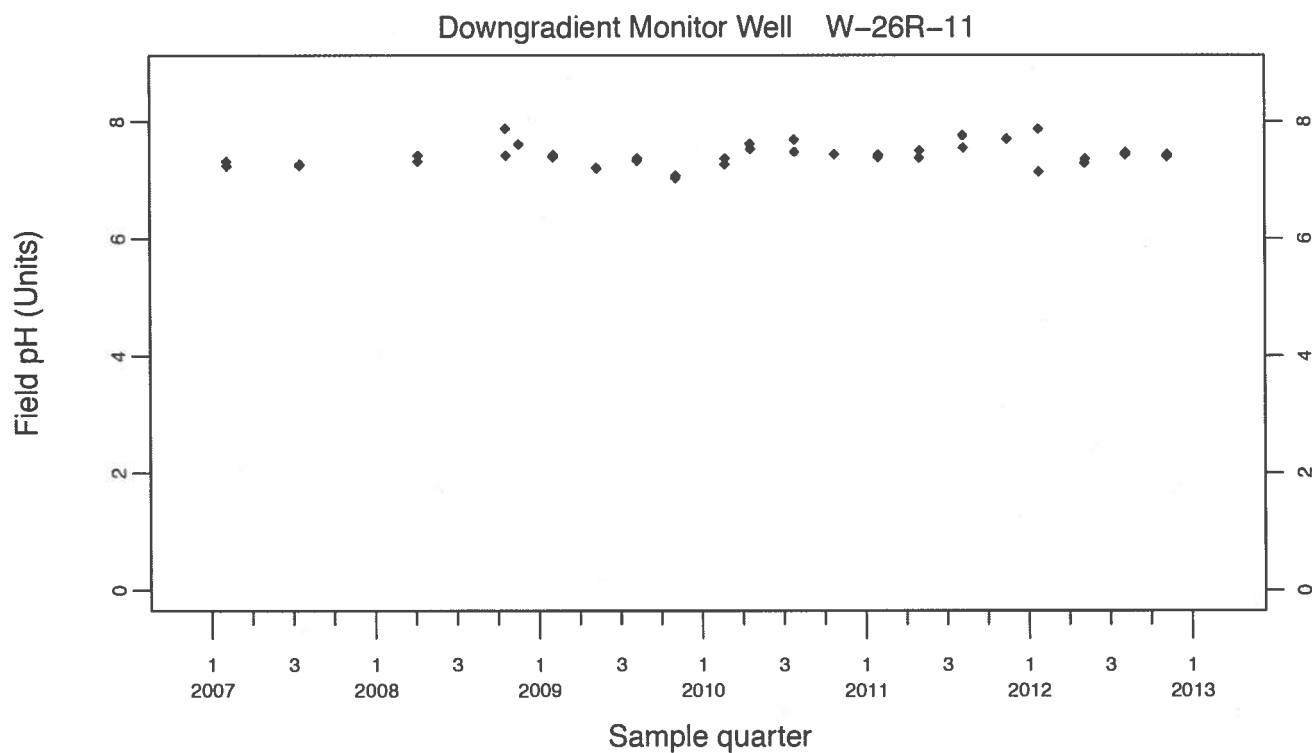
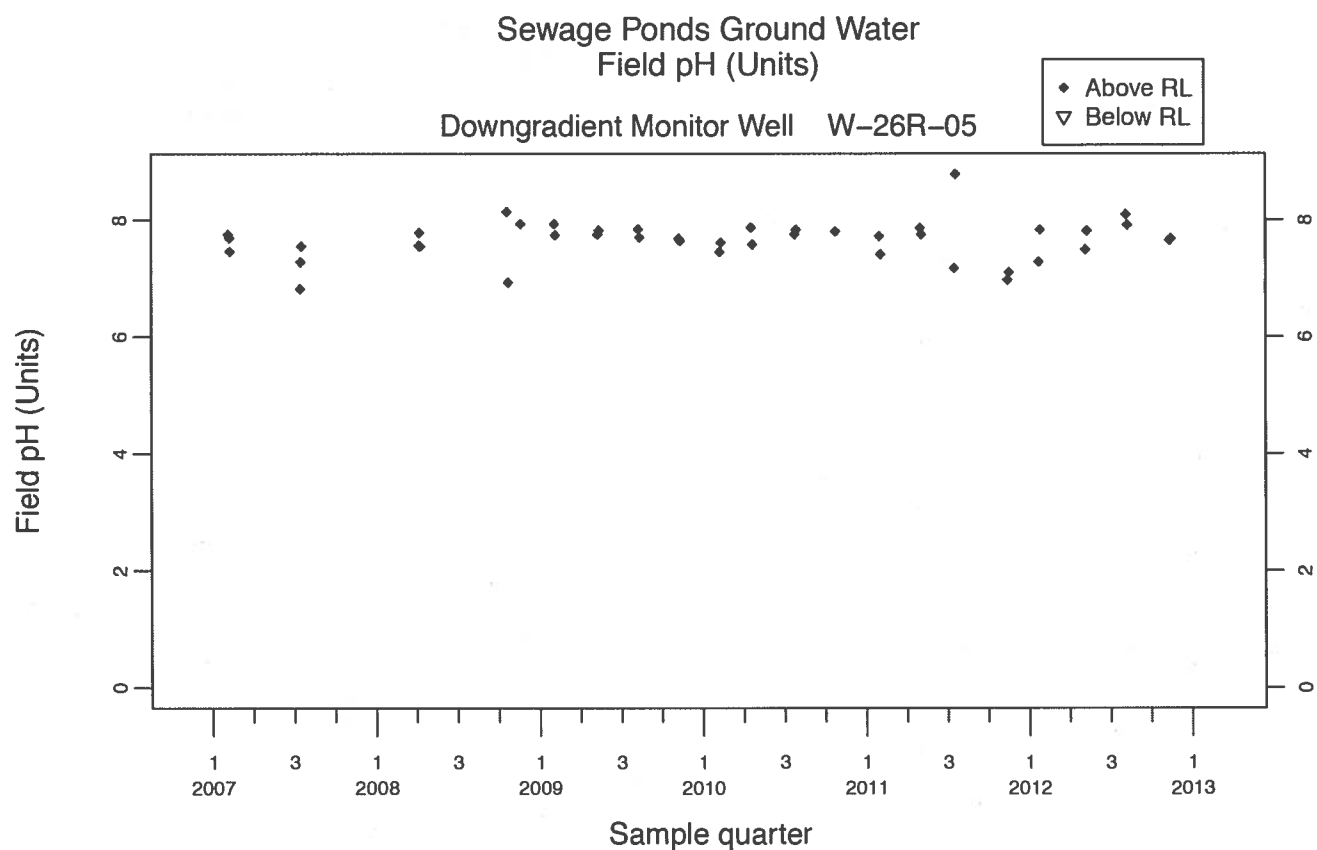




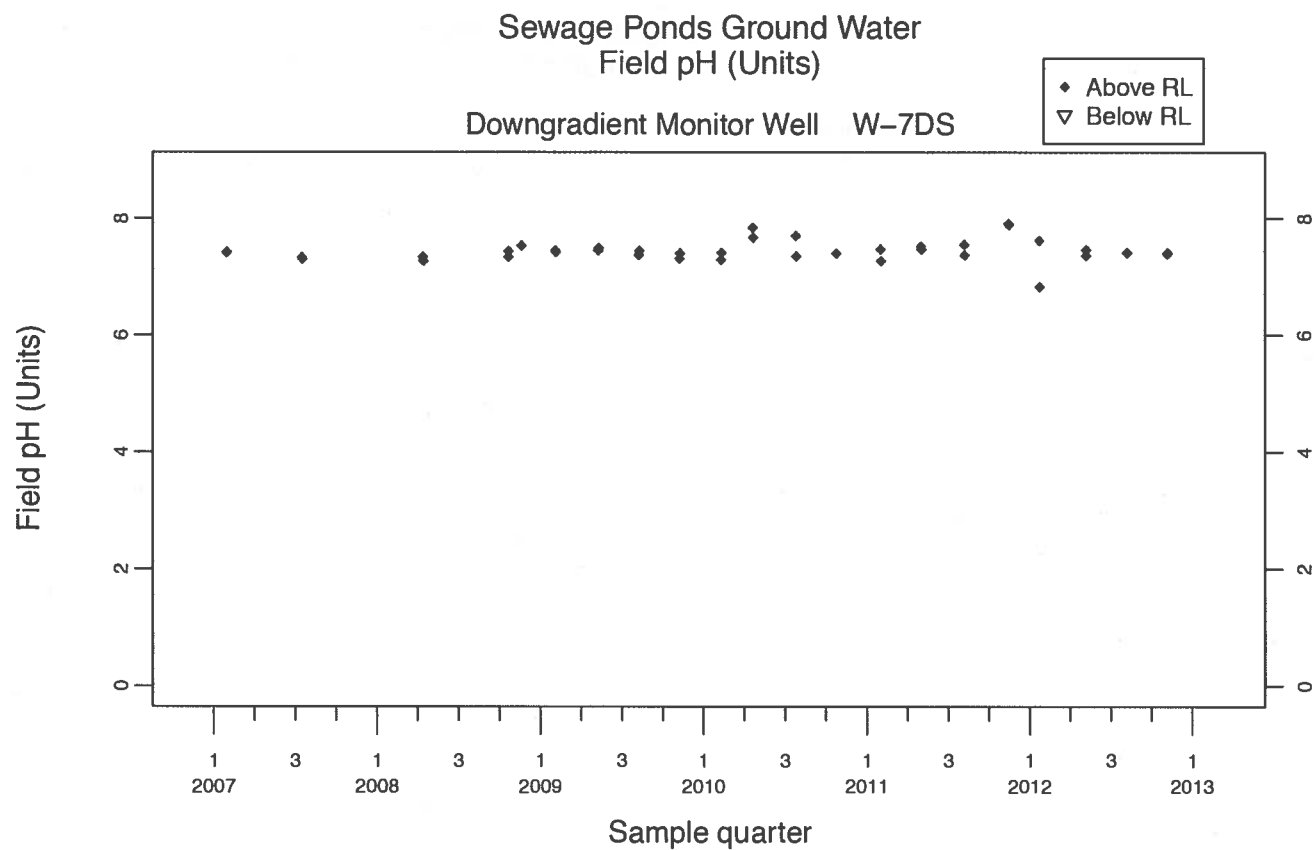


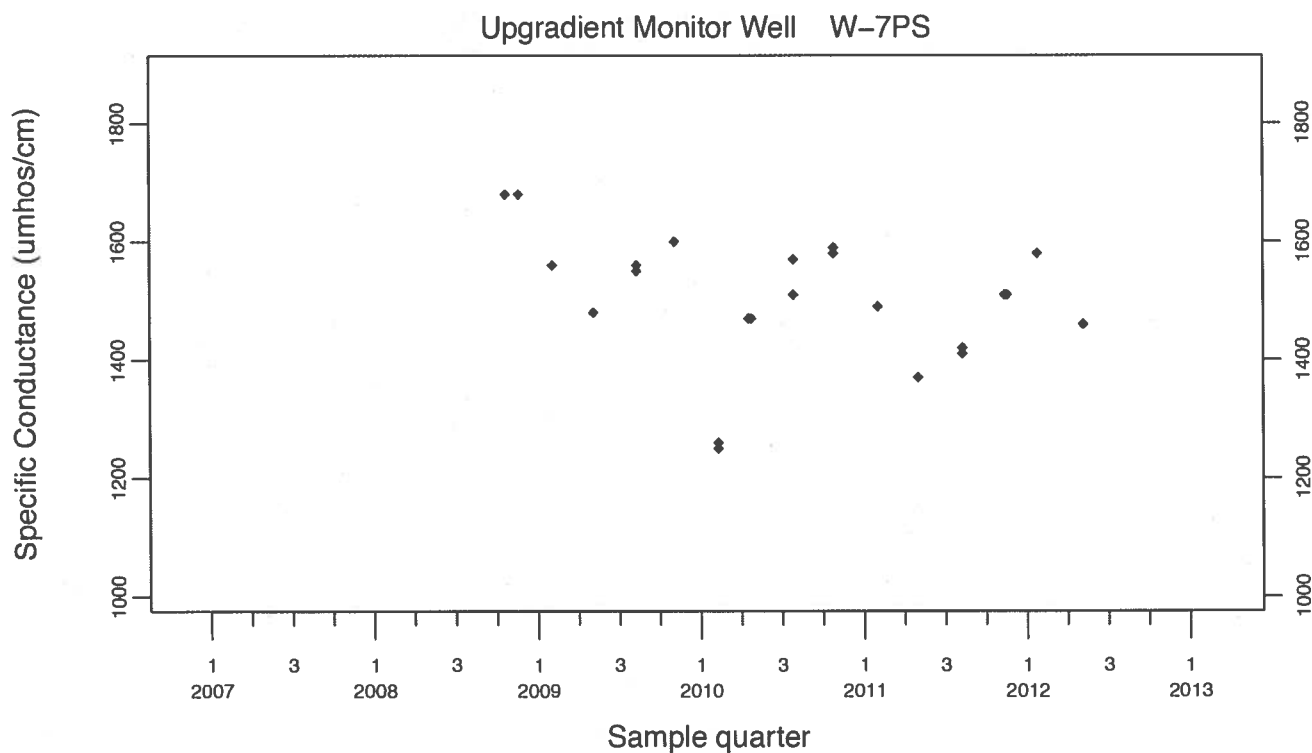
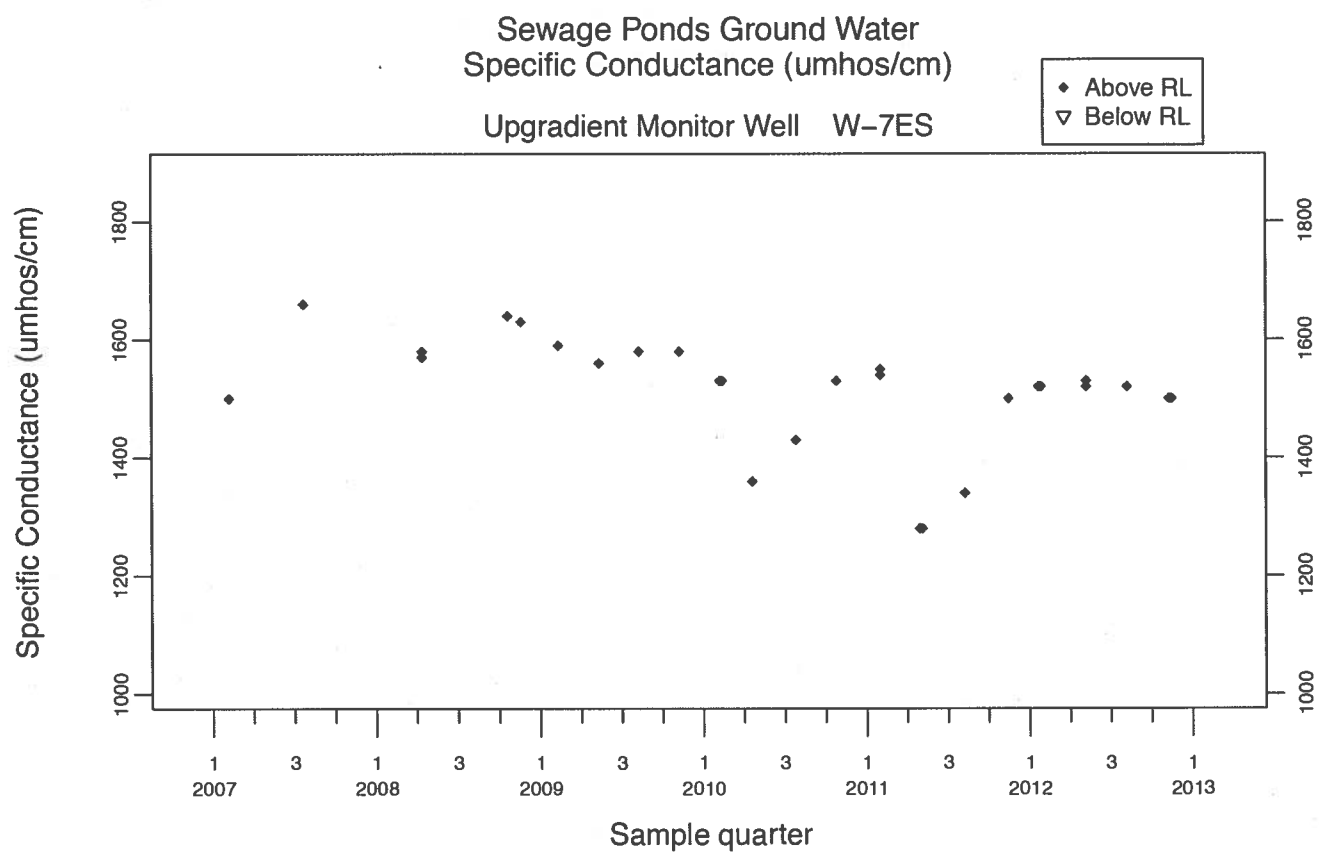


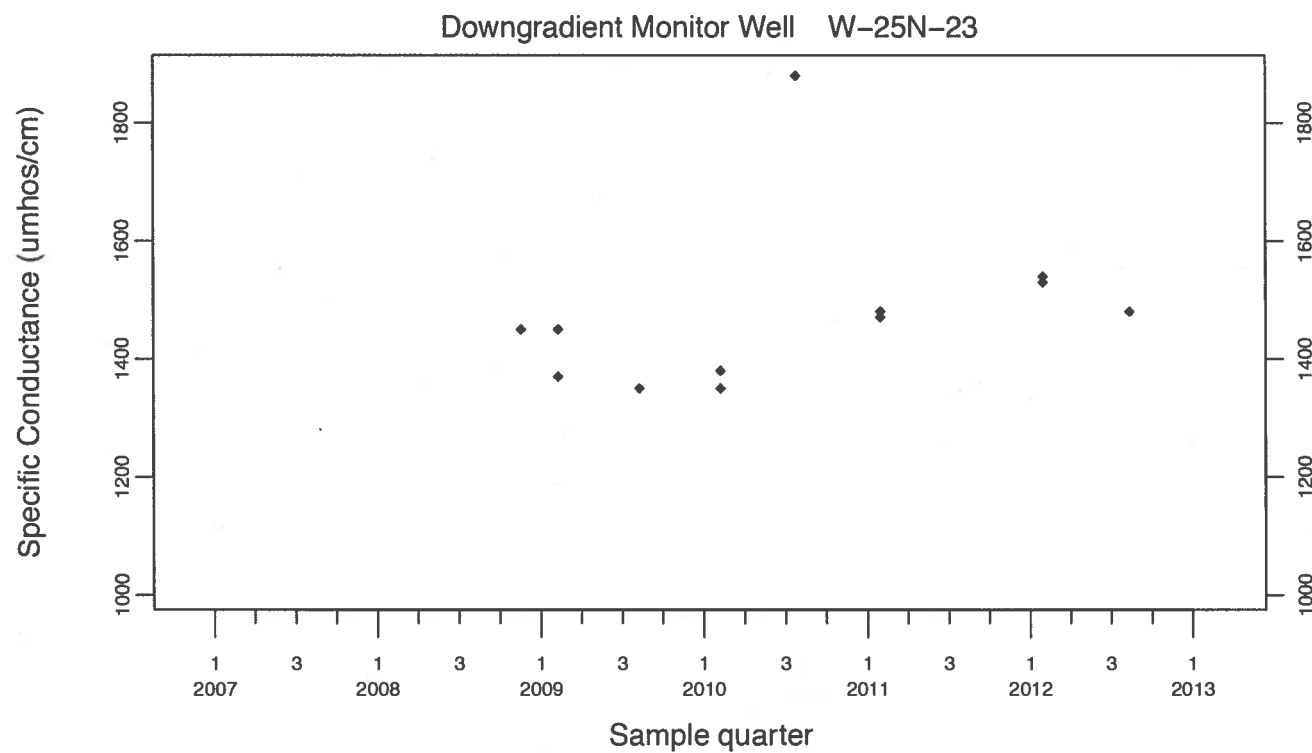
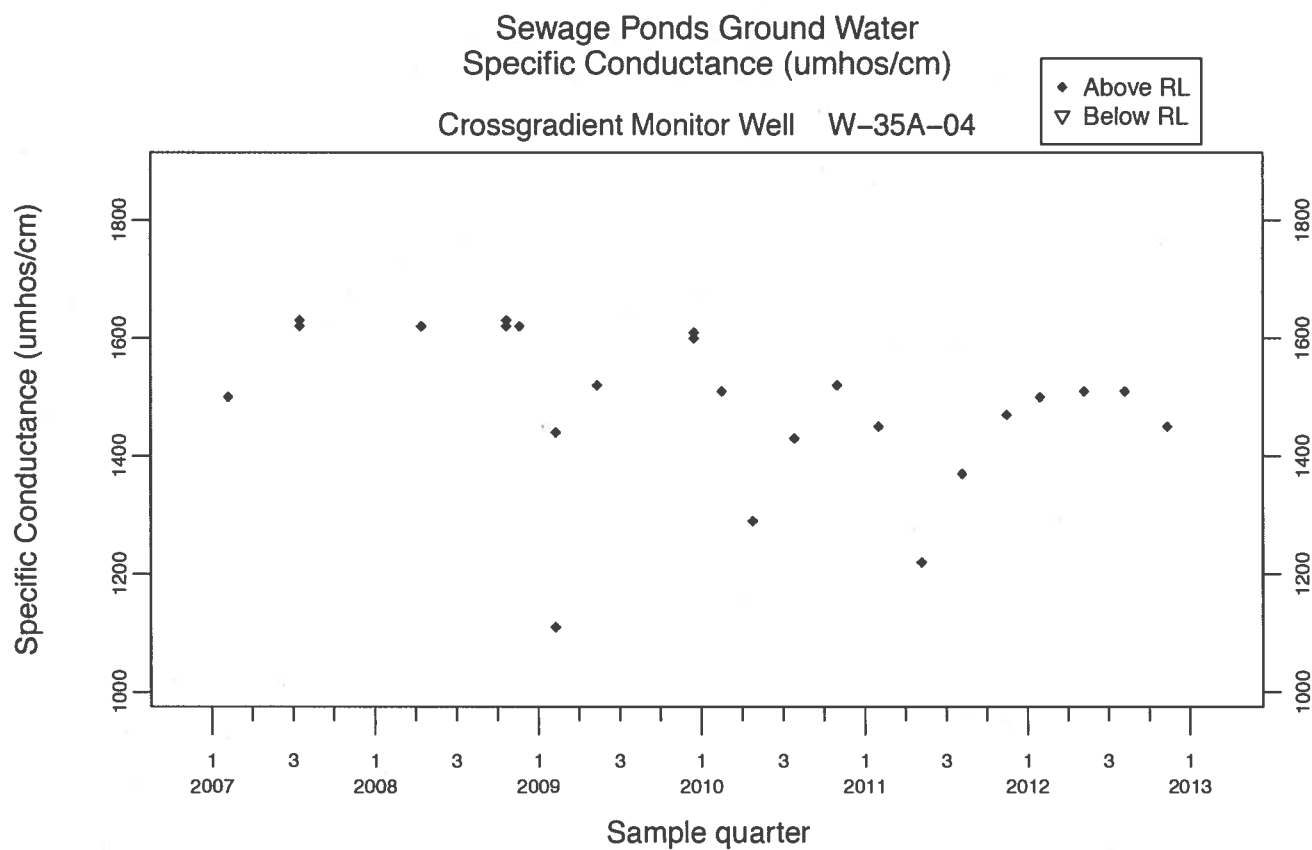


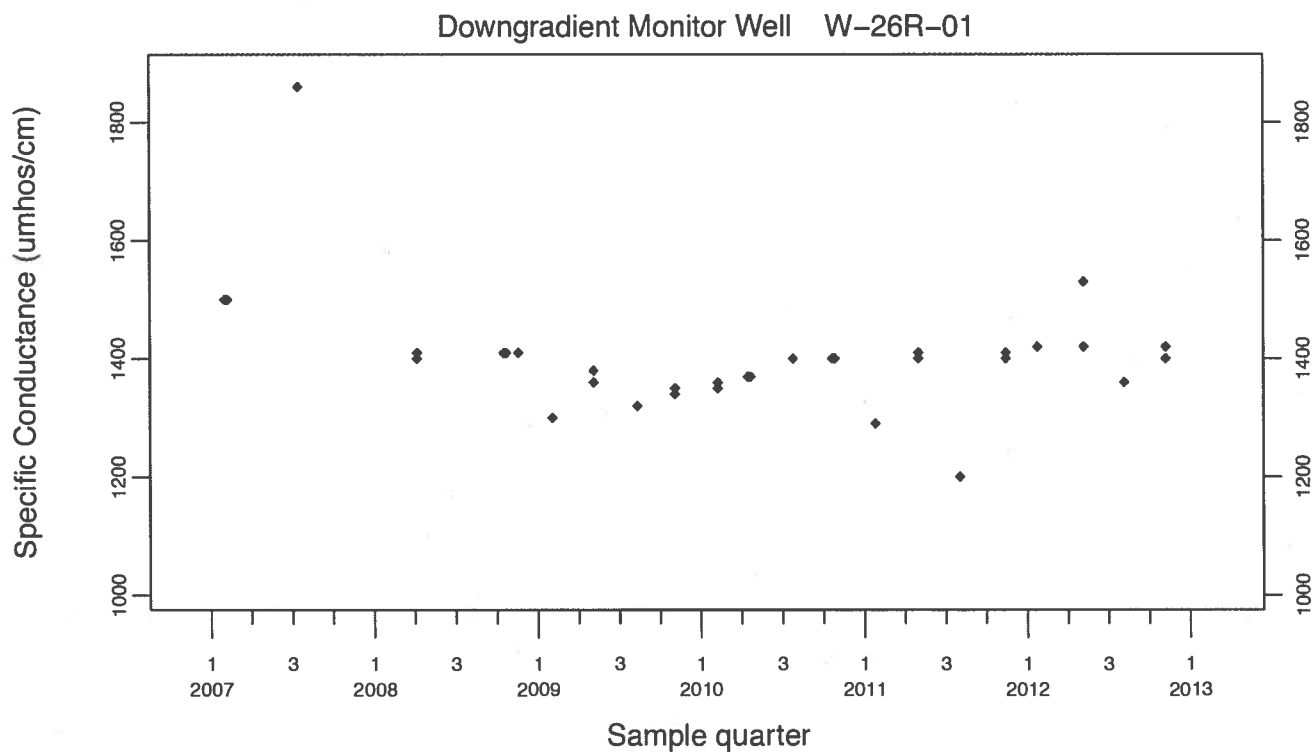
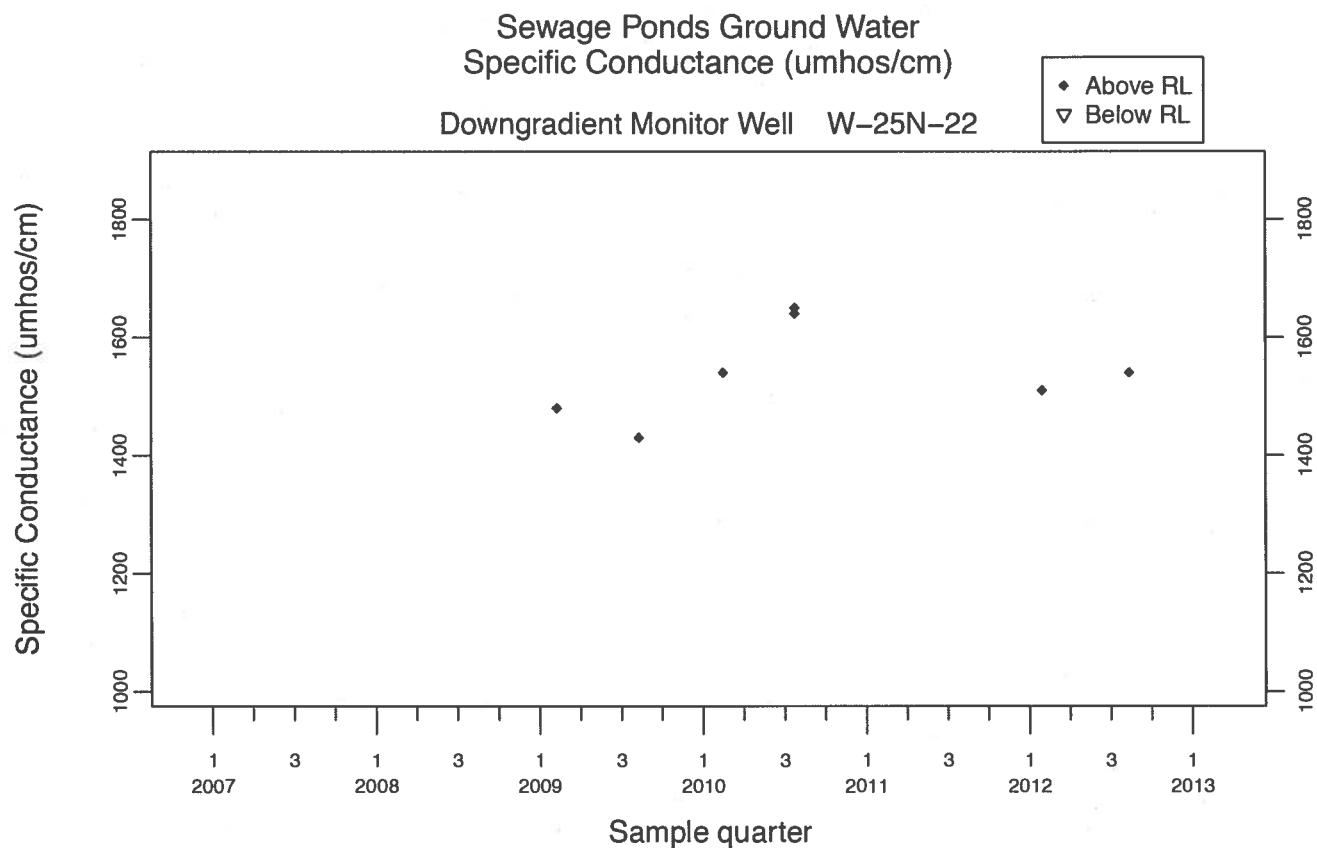


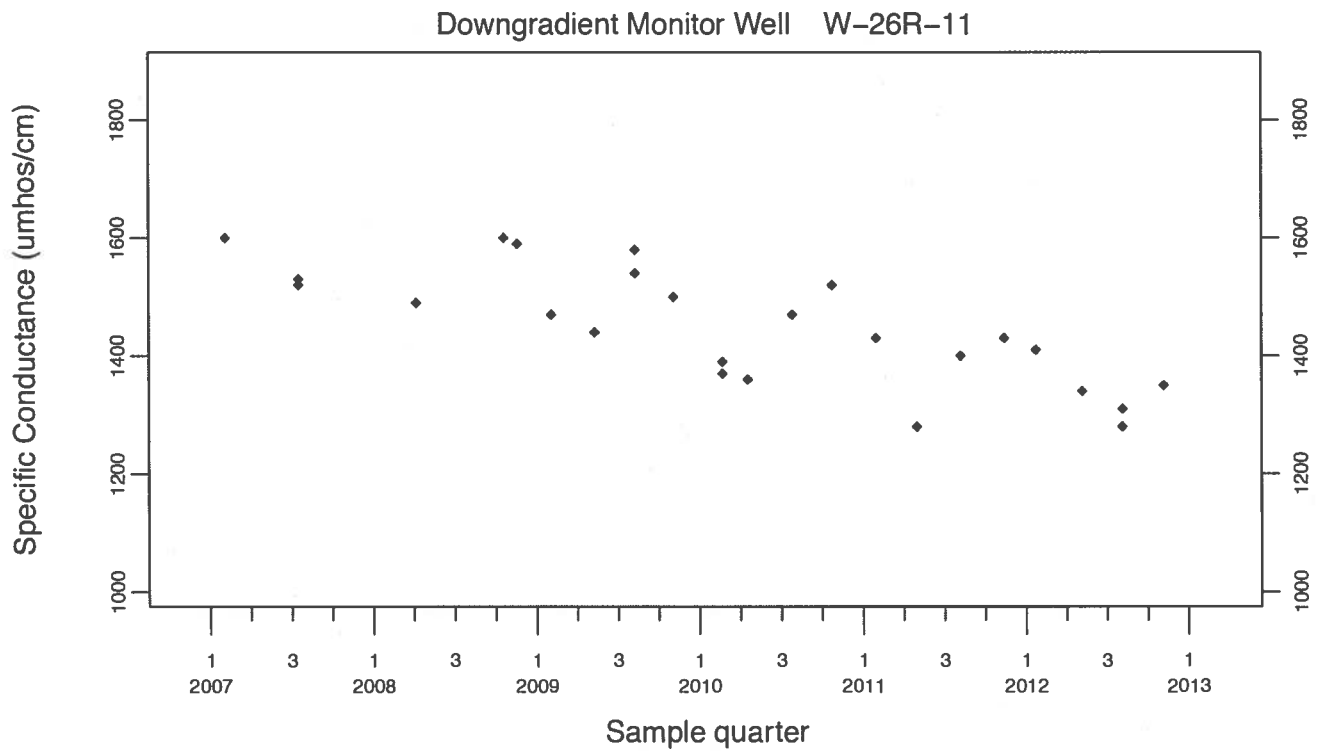
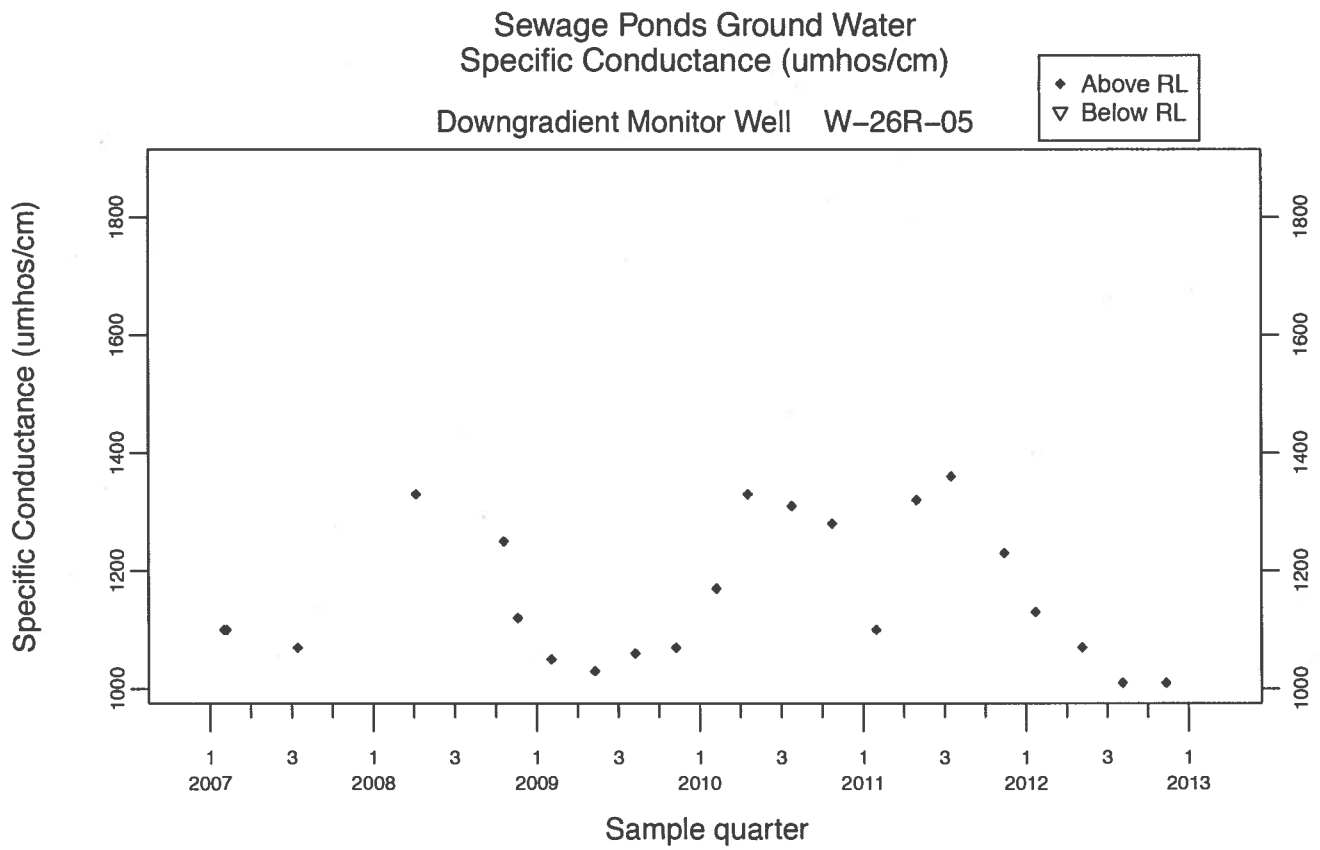


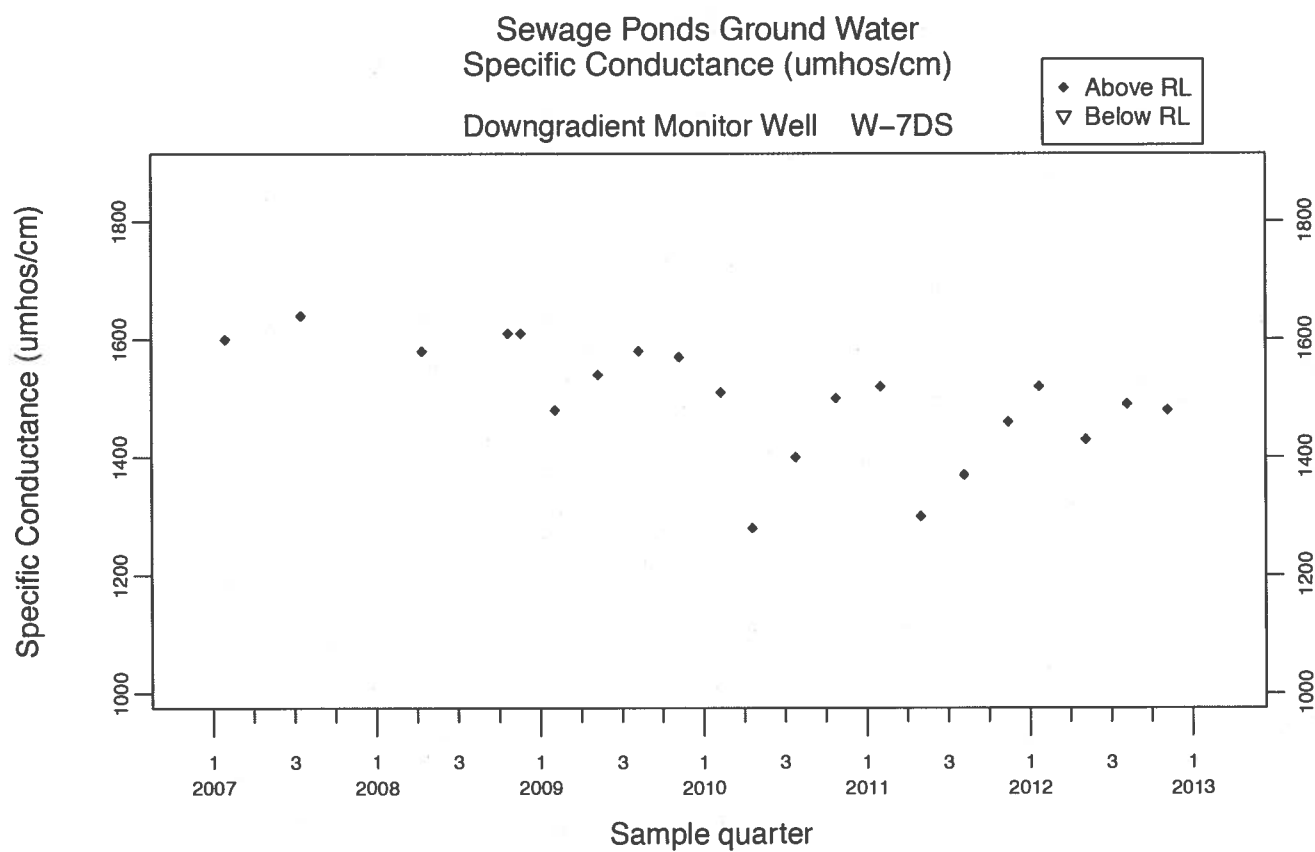


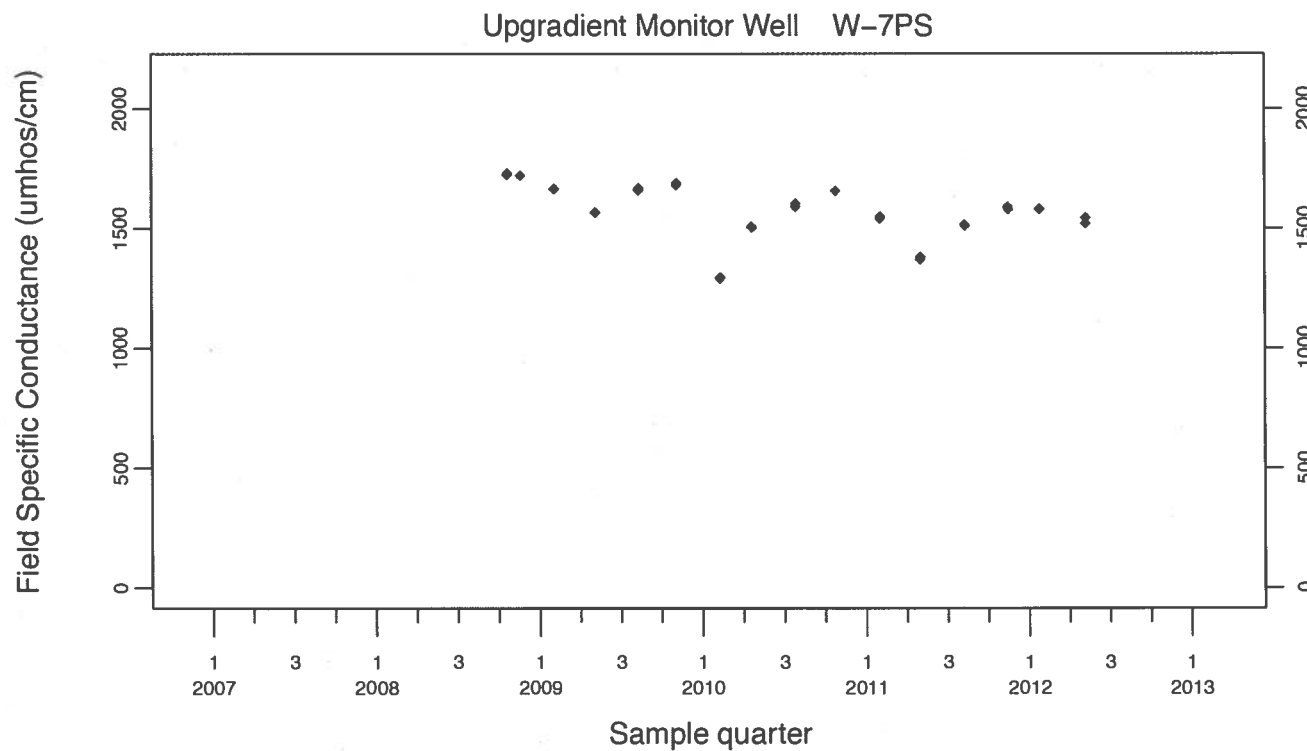
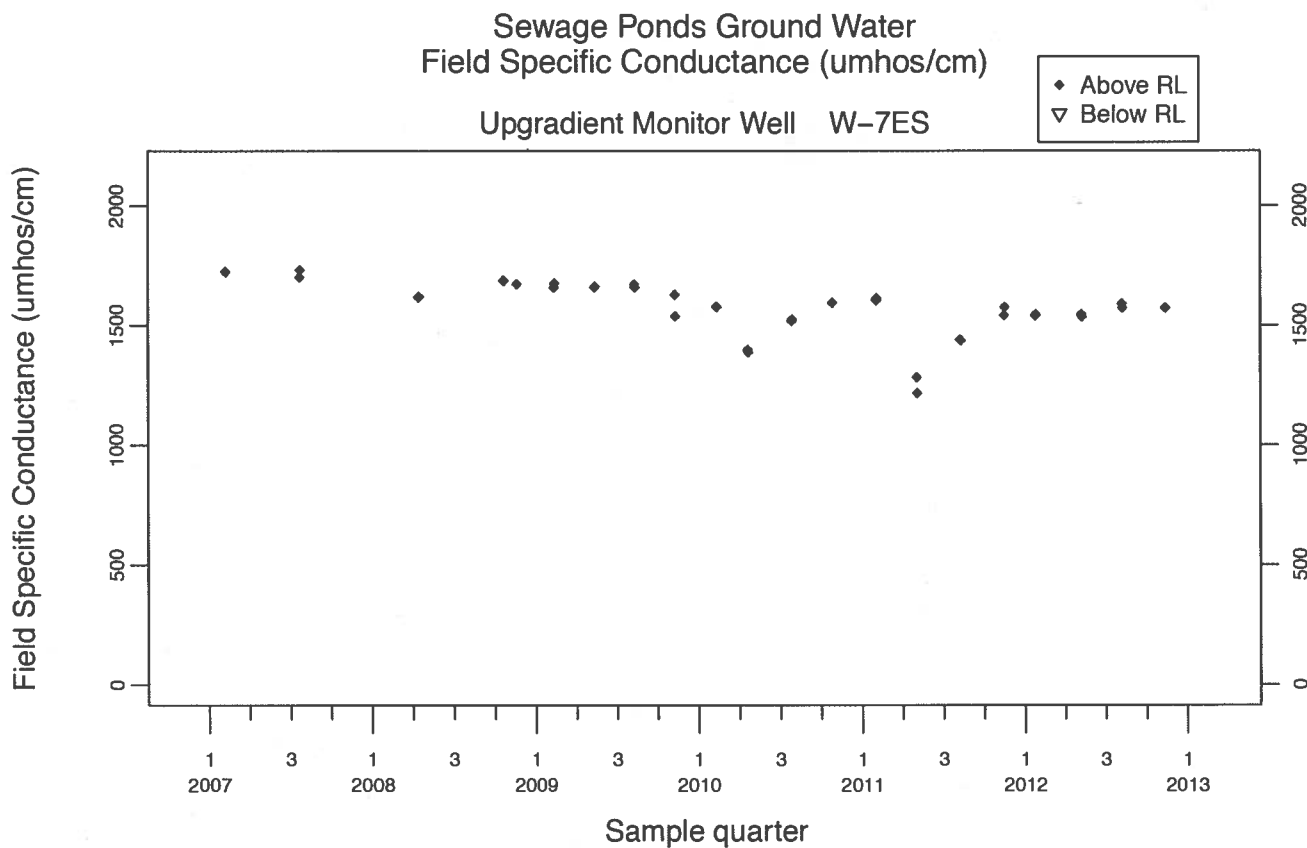








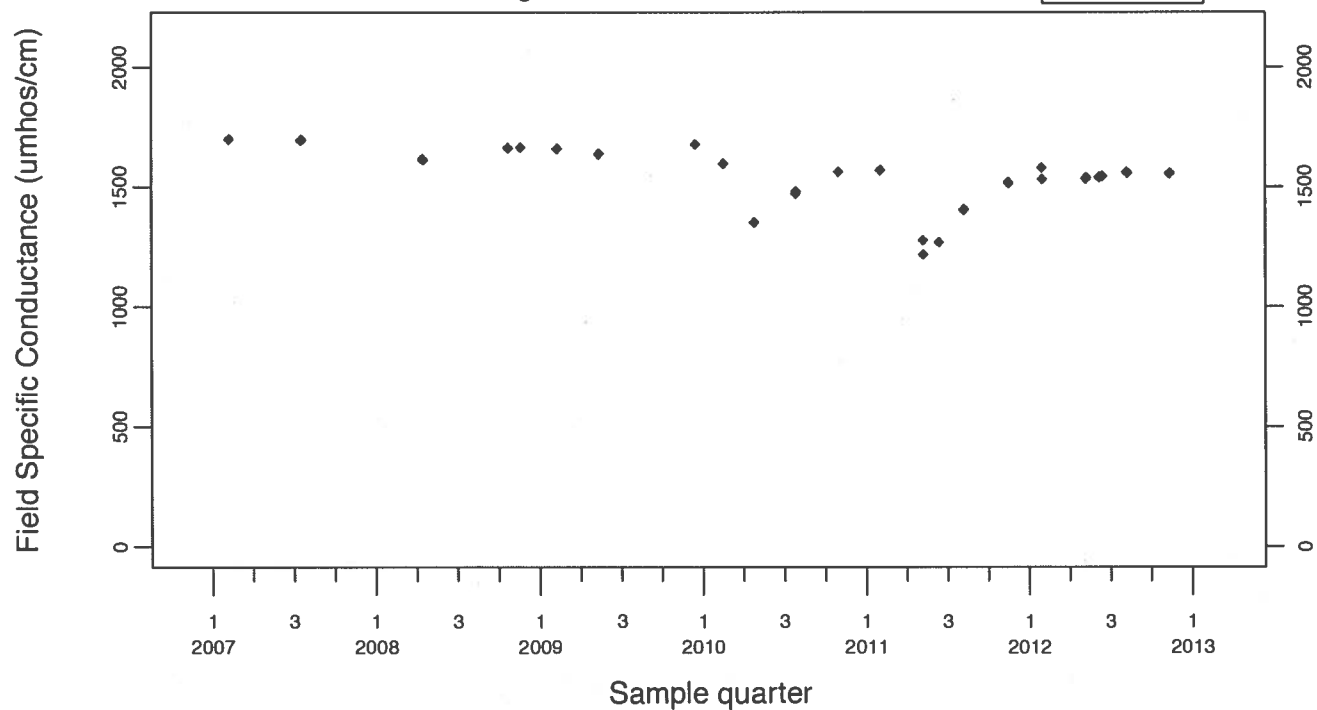




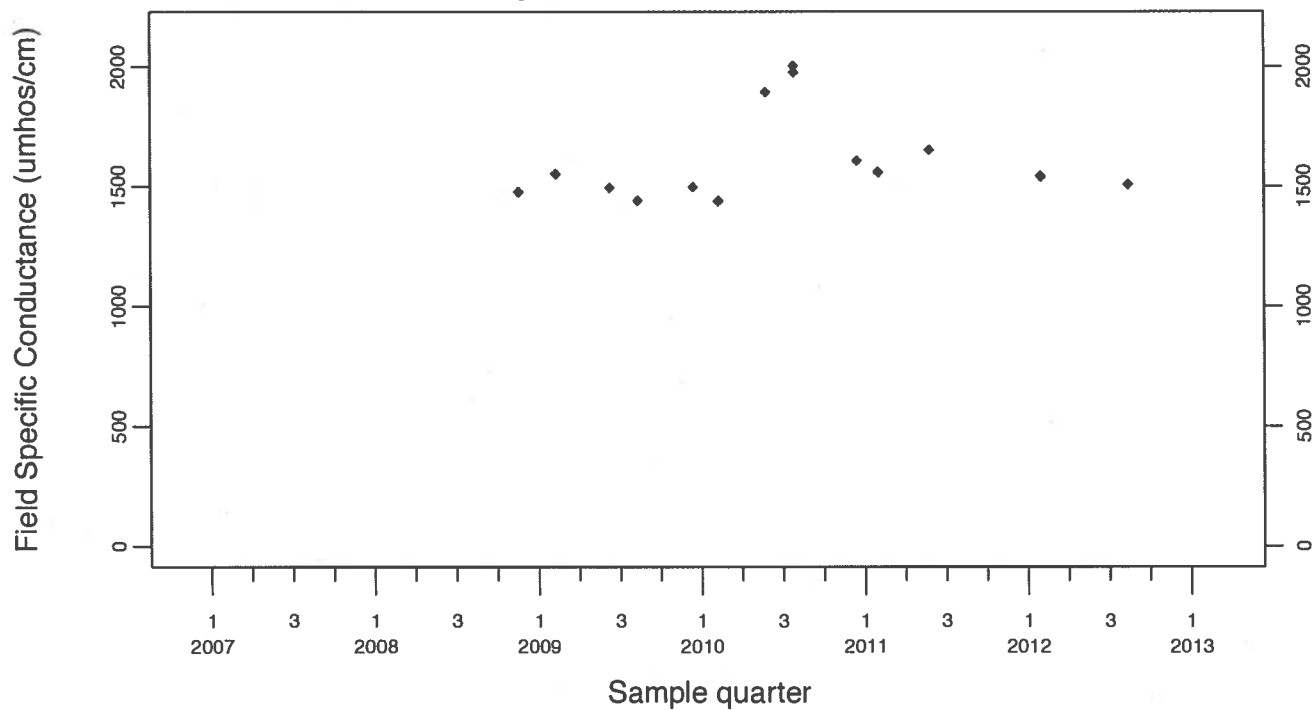
# Sewage Ponds Ground Water Field Specific Conductance (umhos/cm)

Crossgradient Monitor Well W-35A-04

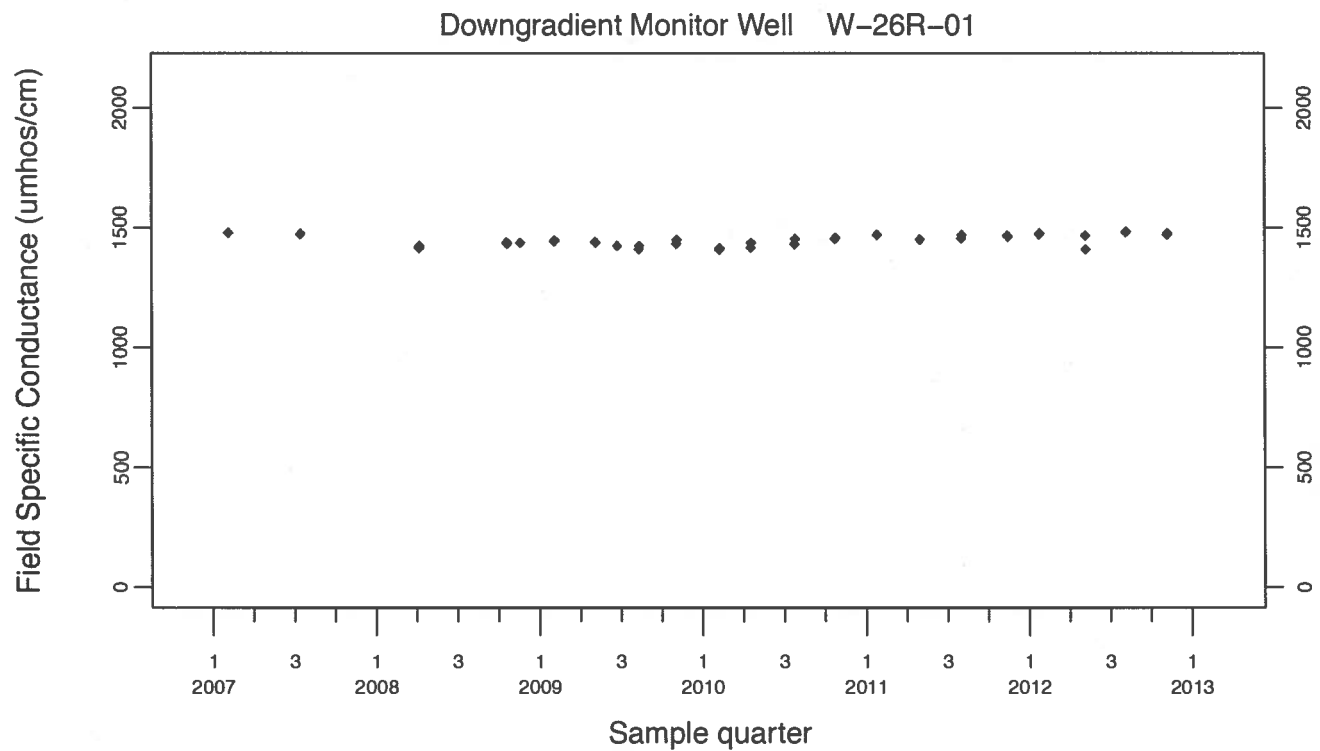
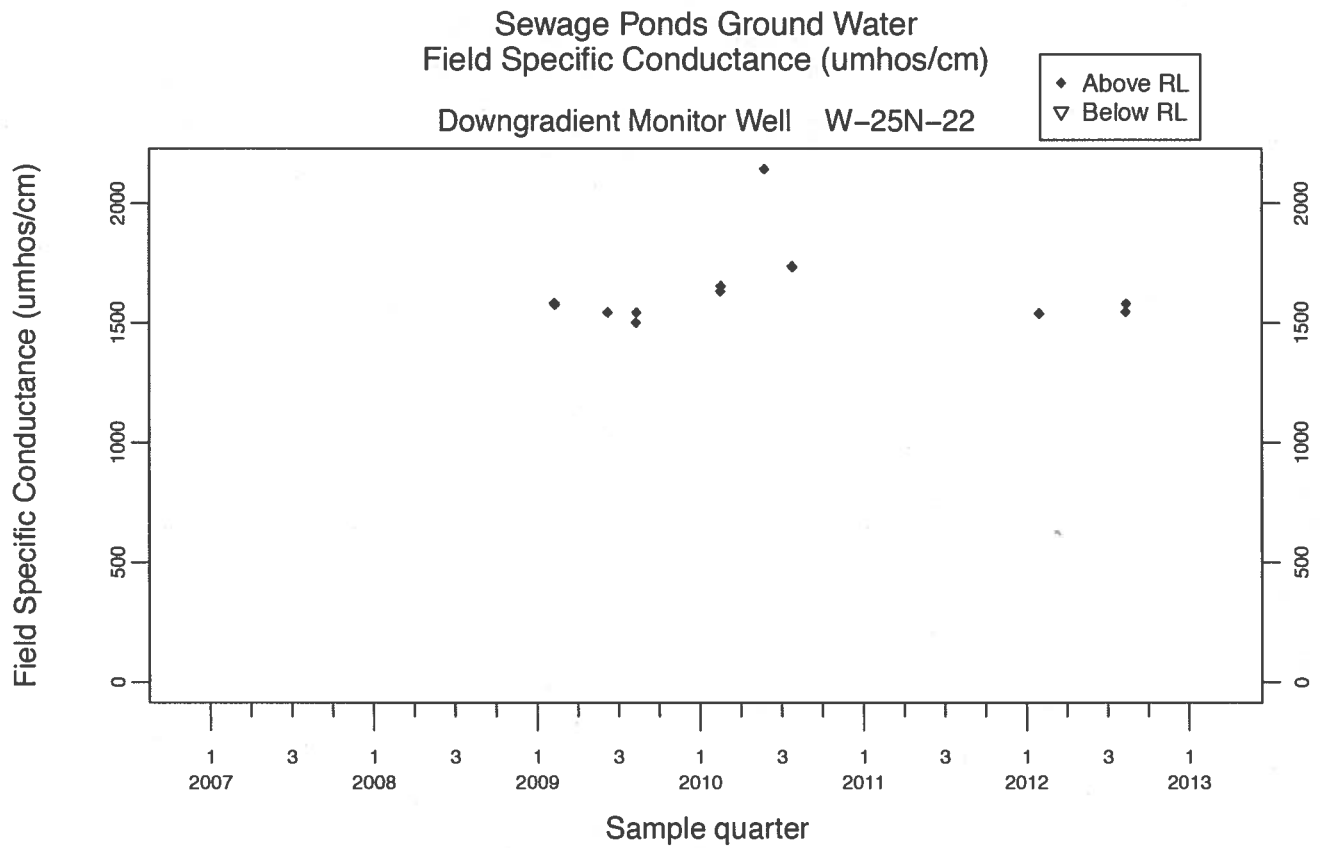
◆ Above RL  
 ▼ Below RL



## Downgradient Monitor Well W-25N-23



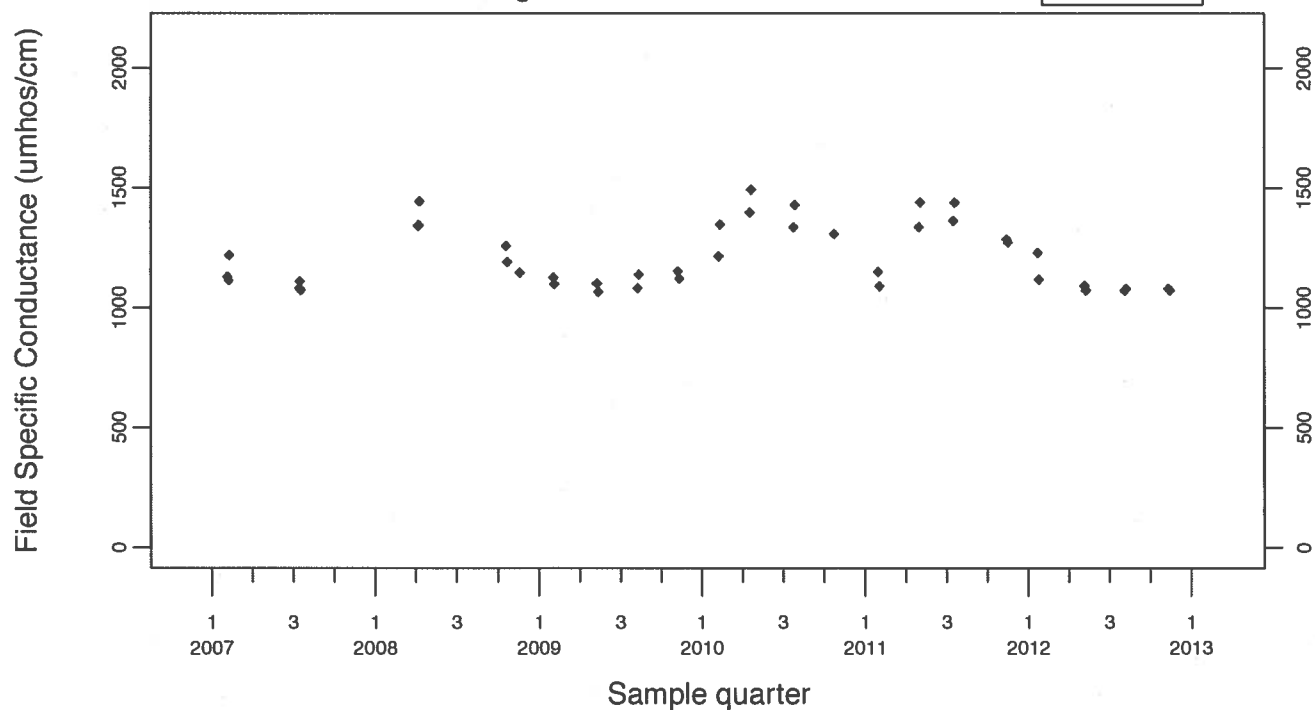




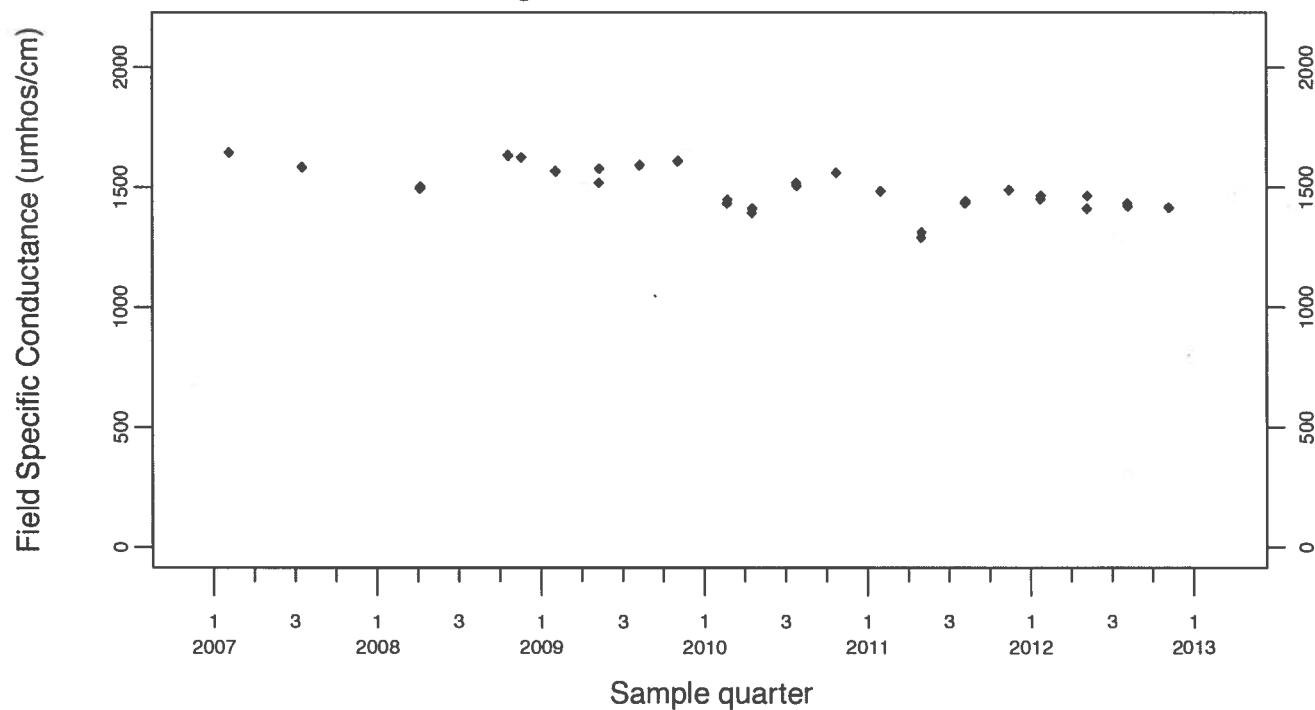
# Sewage Ponds Ground Water Field Specific Conductance (umhos/cm)

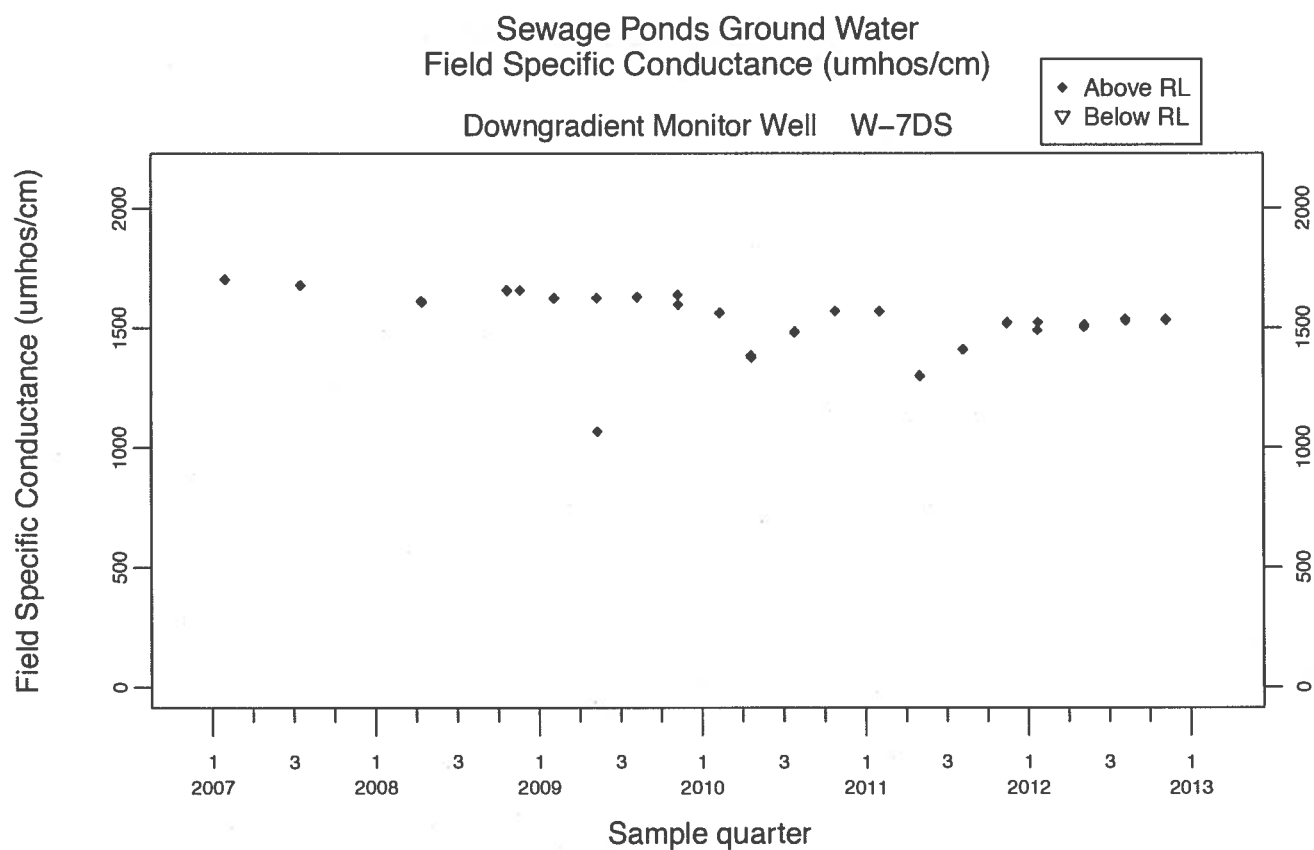
Downgradient Monitor Well W-26R-05

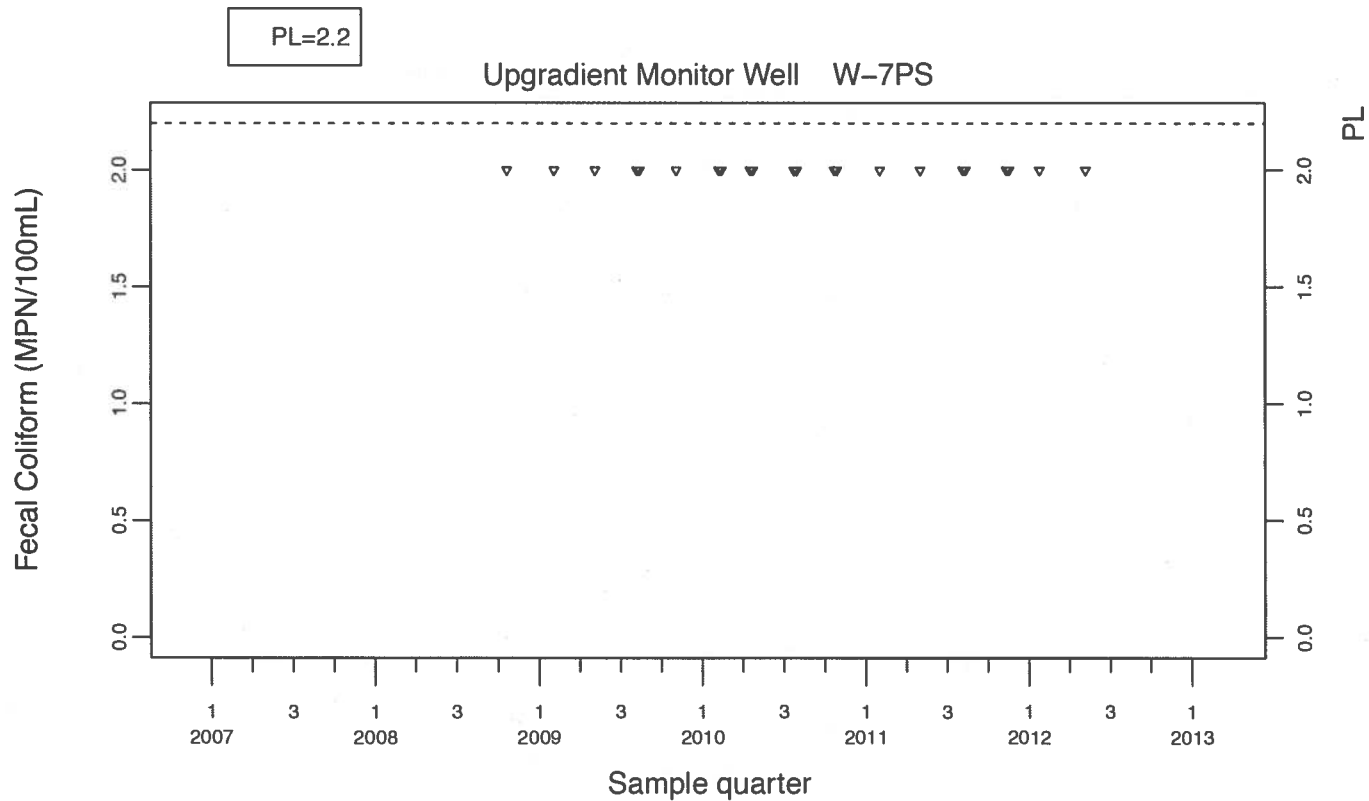
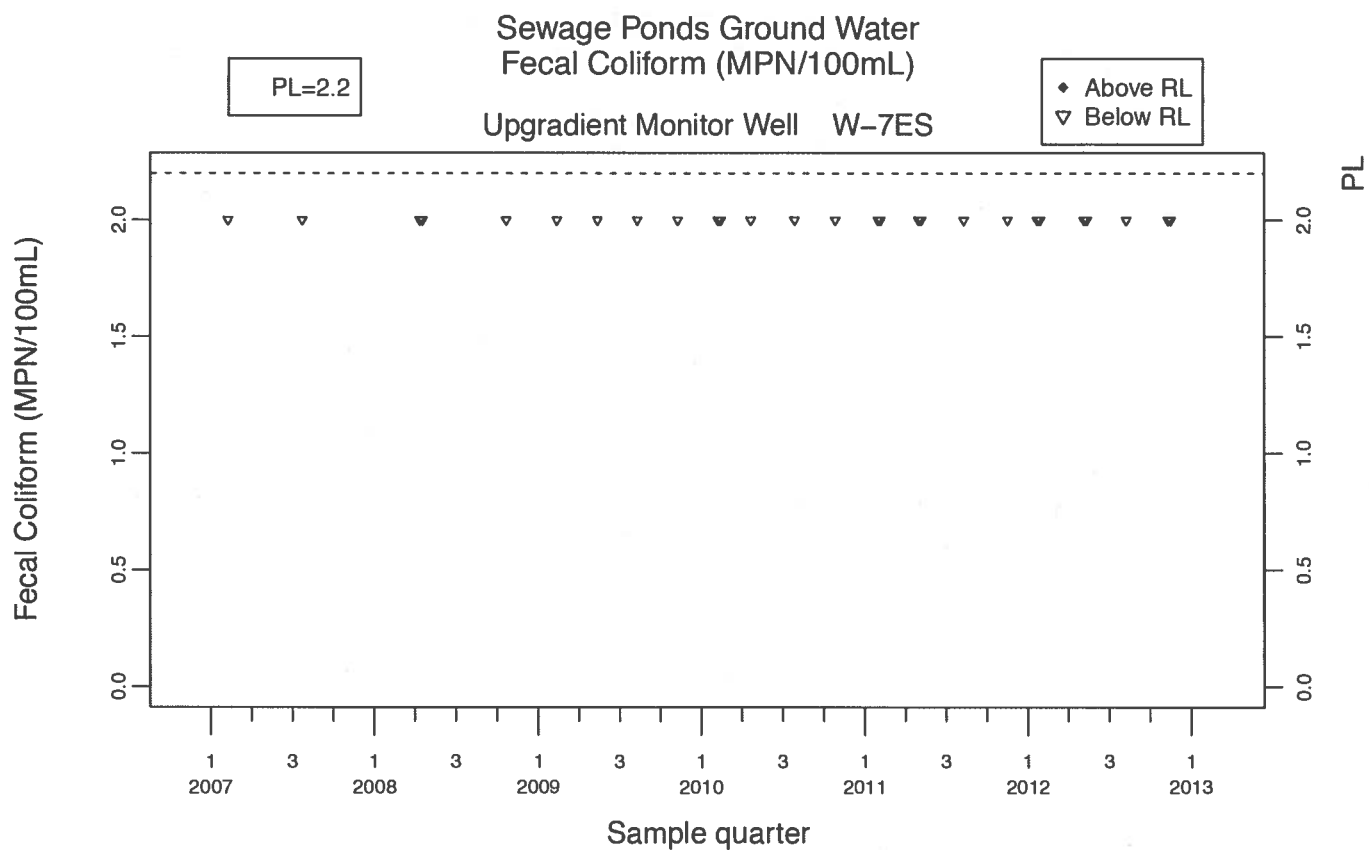
◆ Above RL  
▽ Below RL

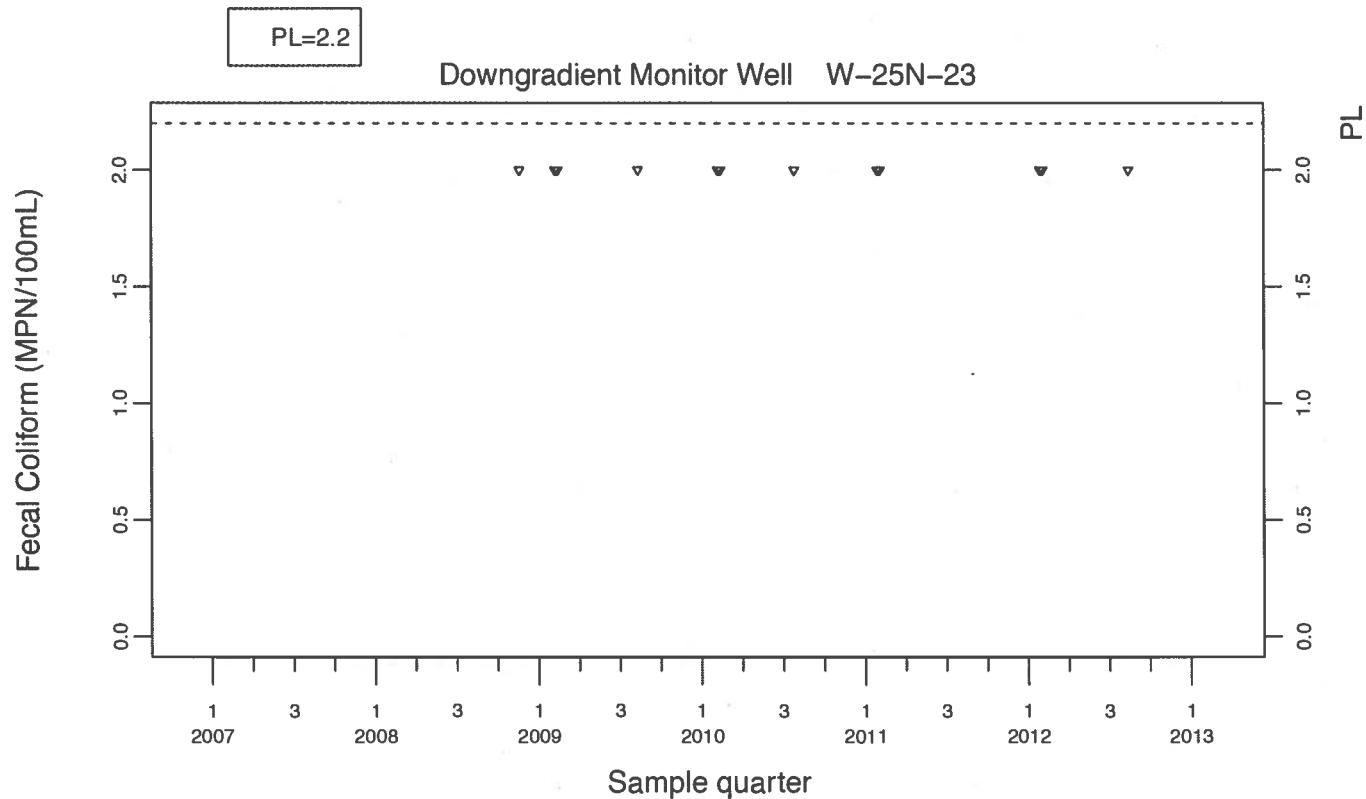
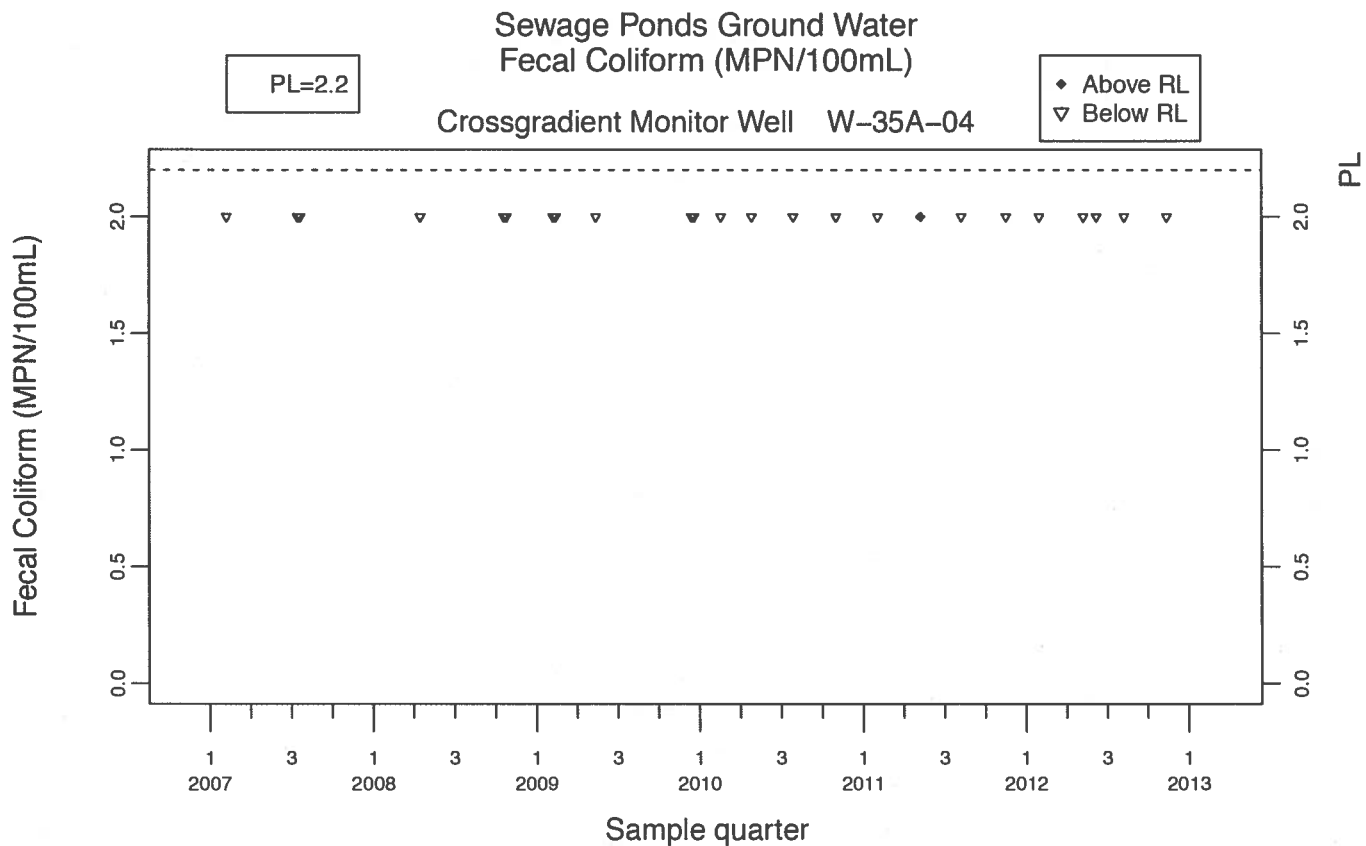


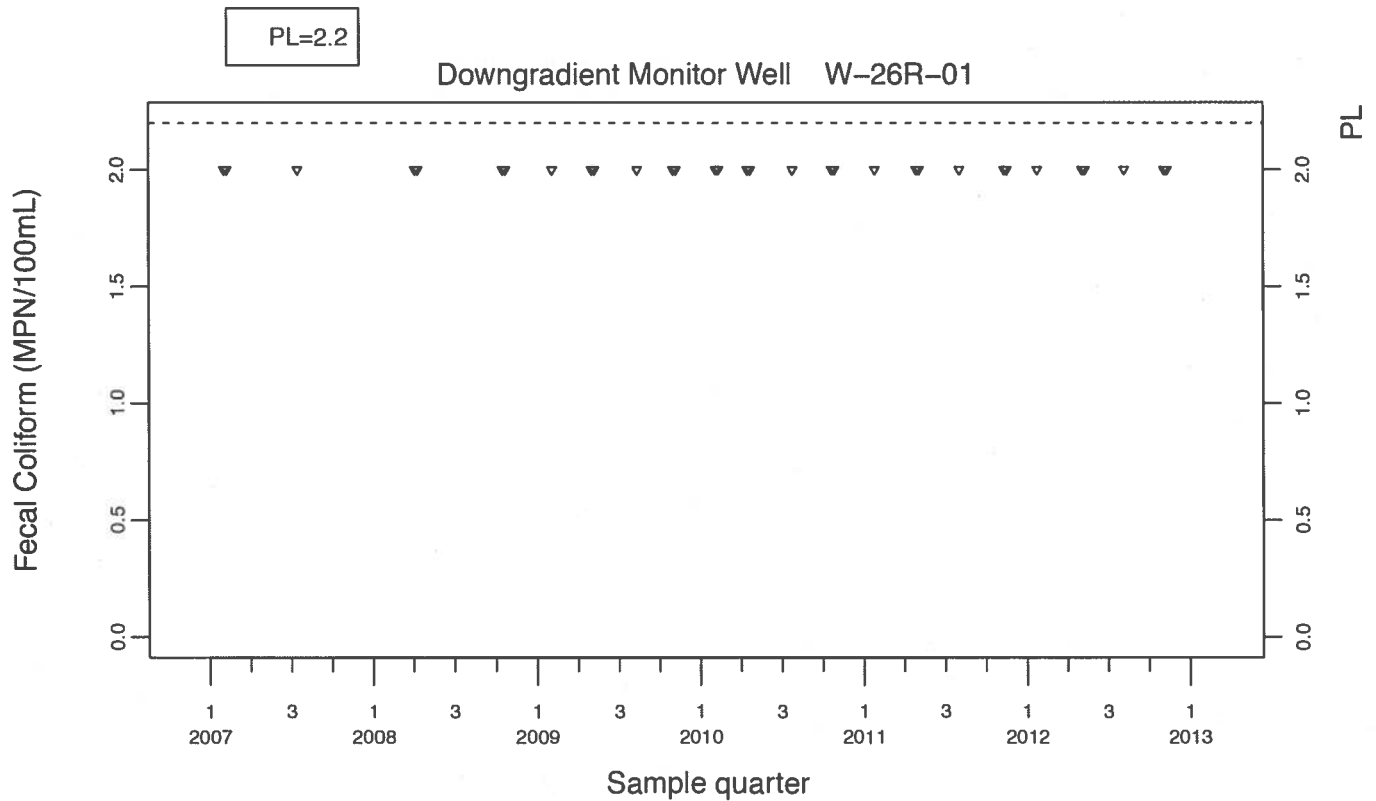
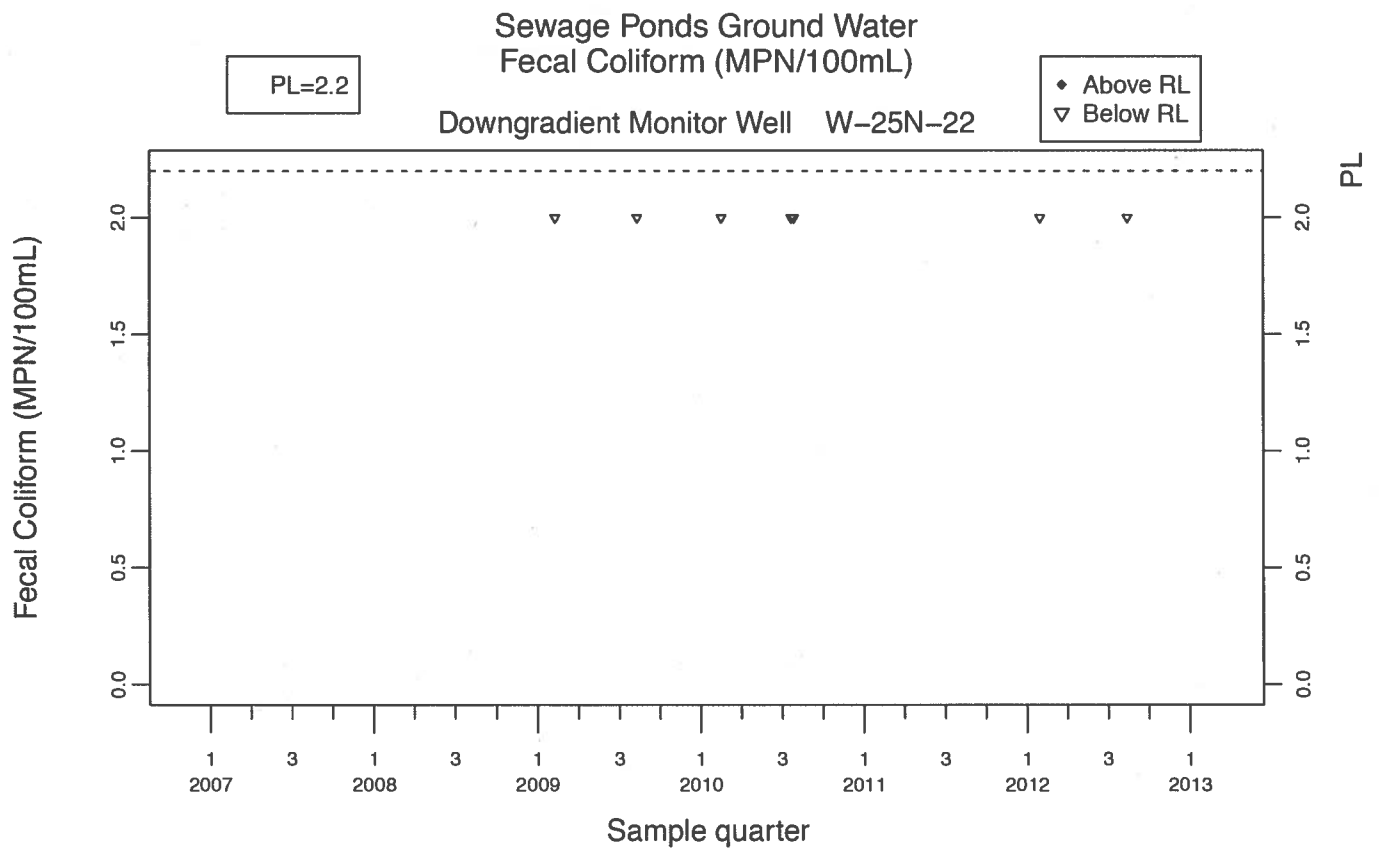
Downgradient Monitor Well W-26R-11

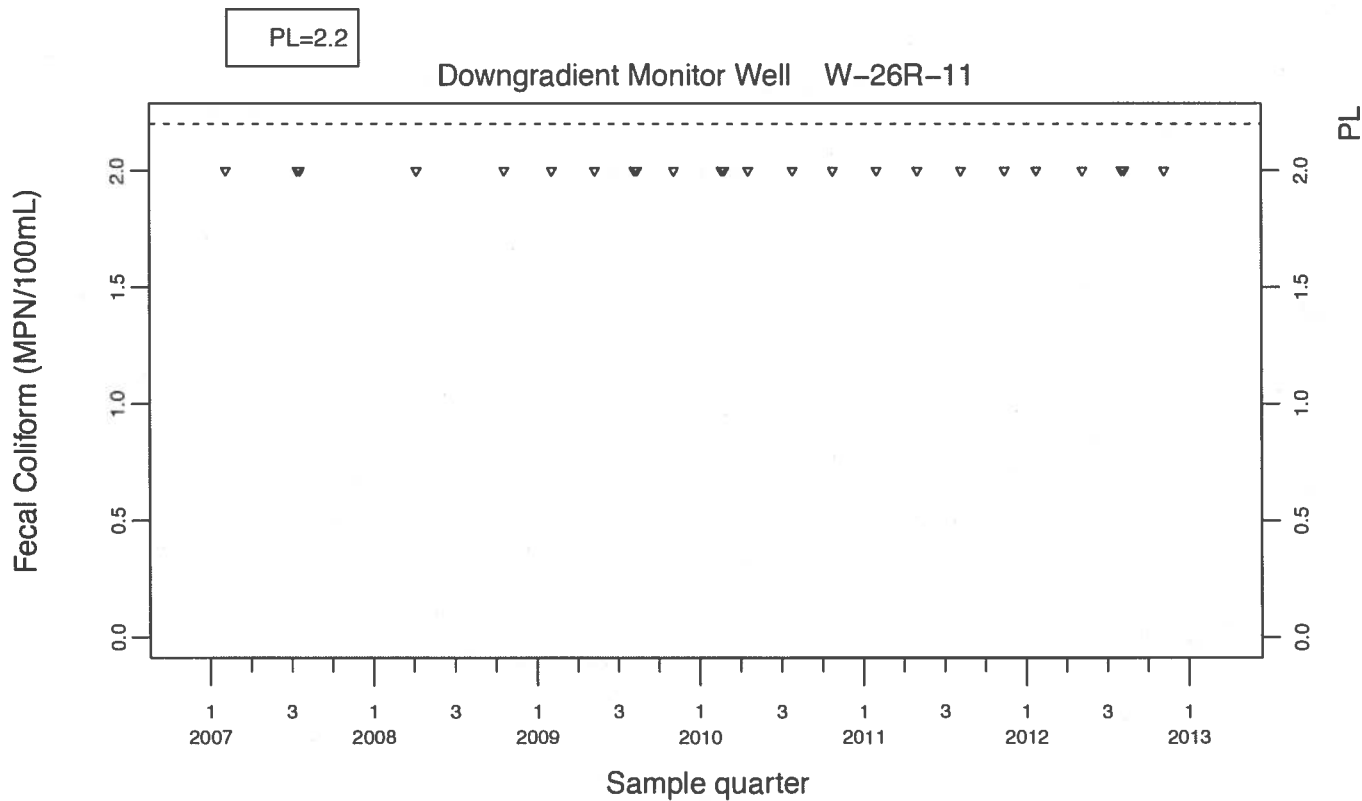
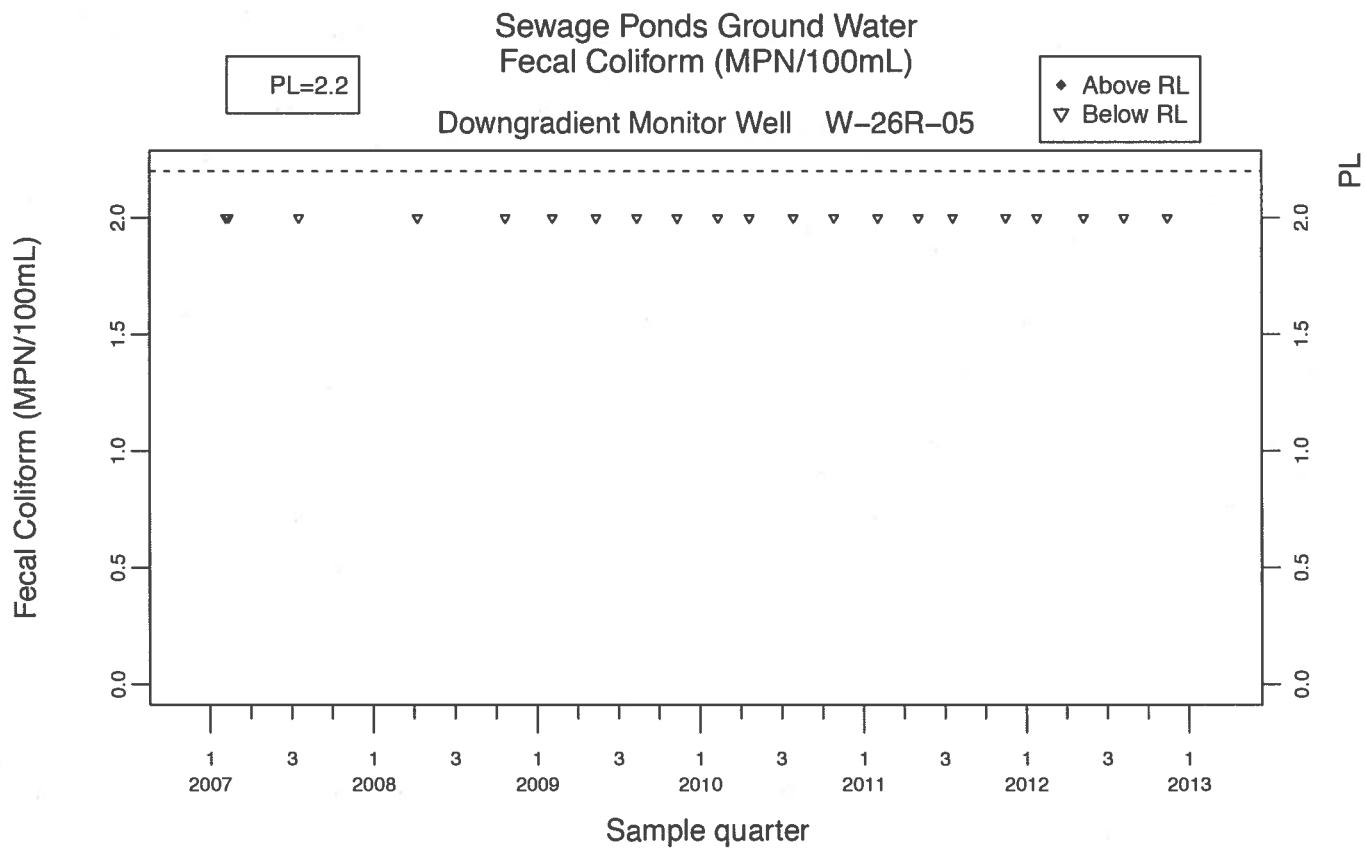


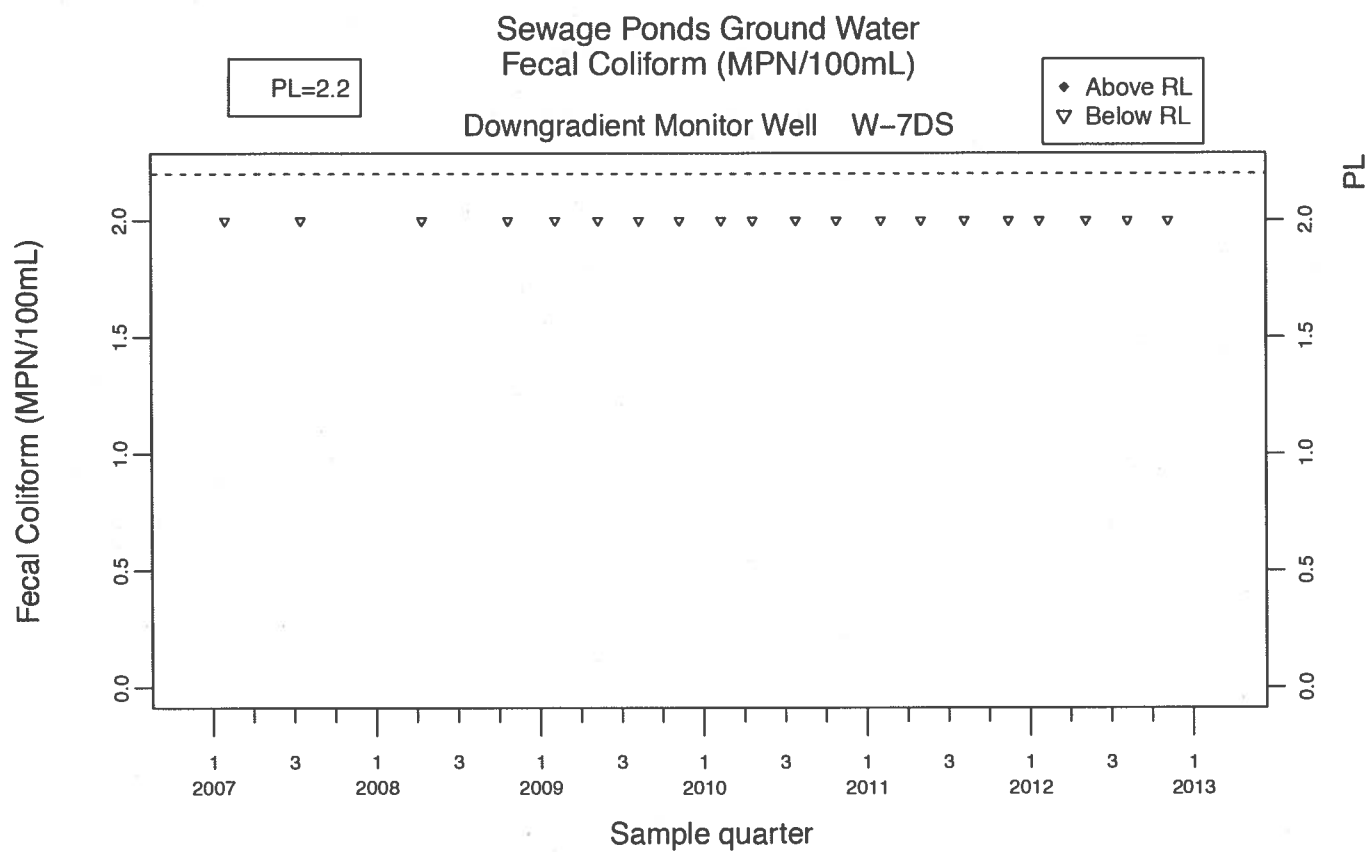




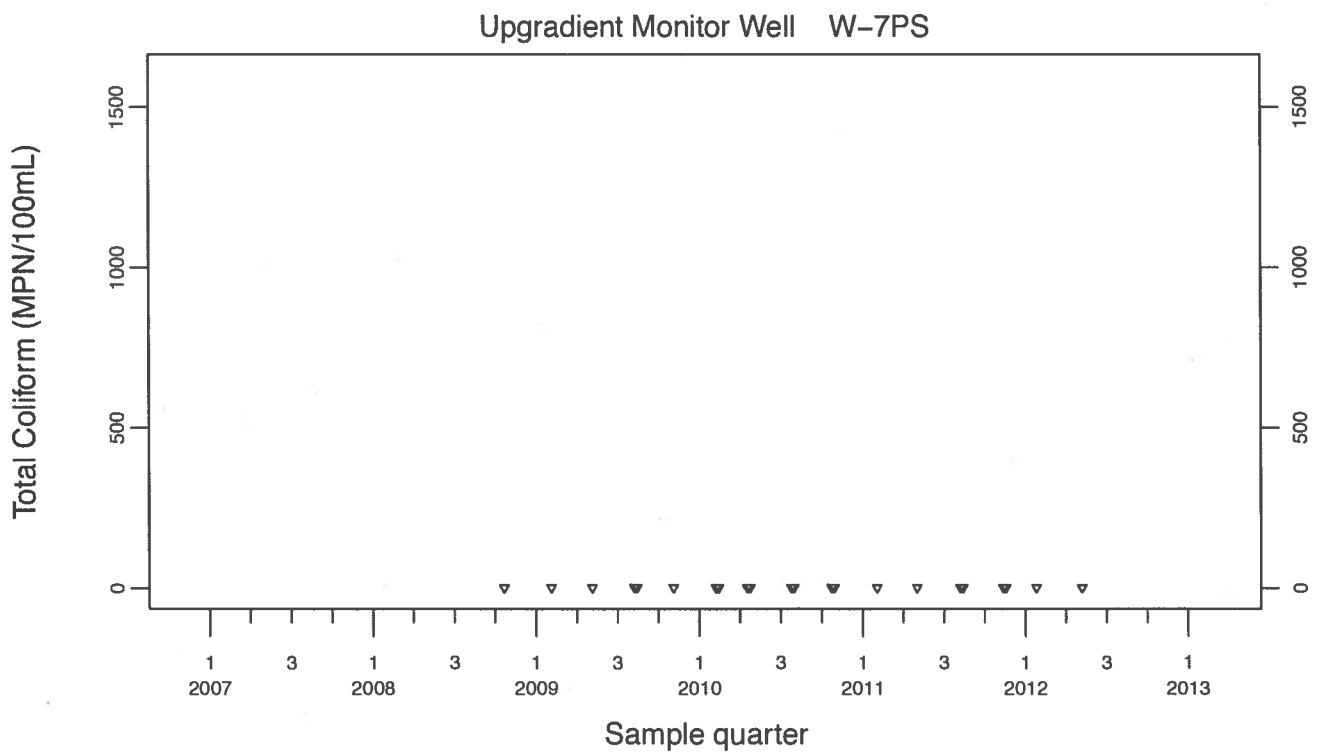
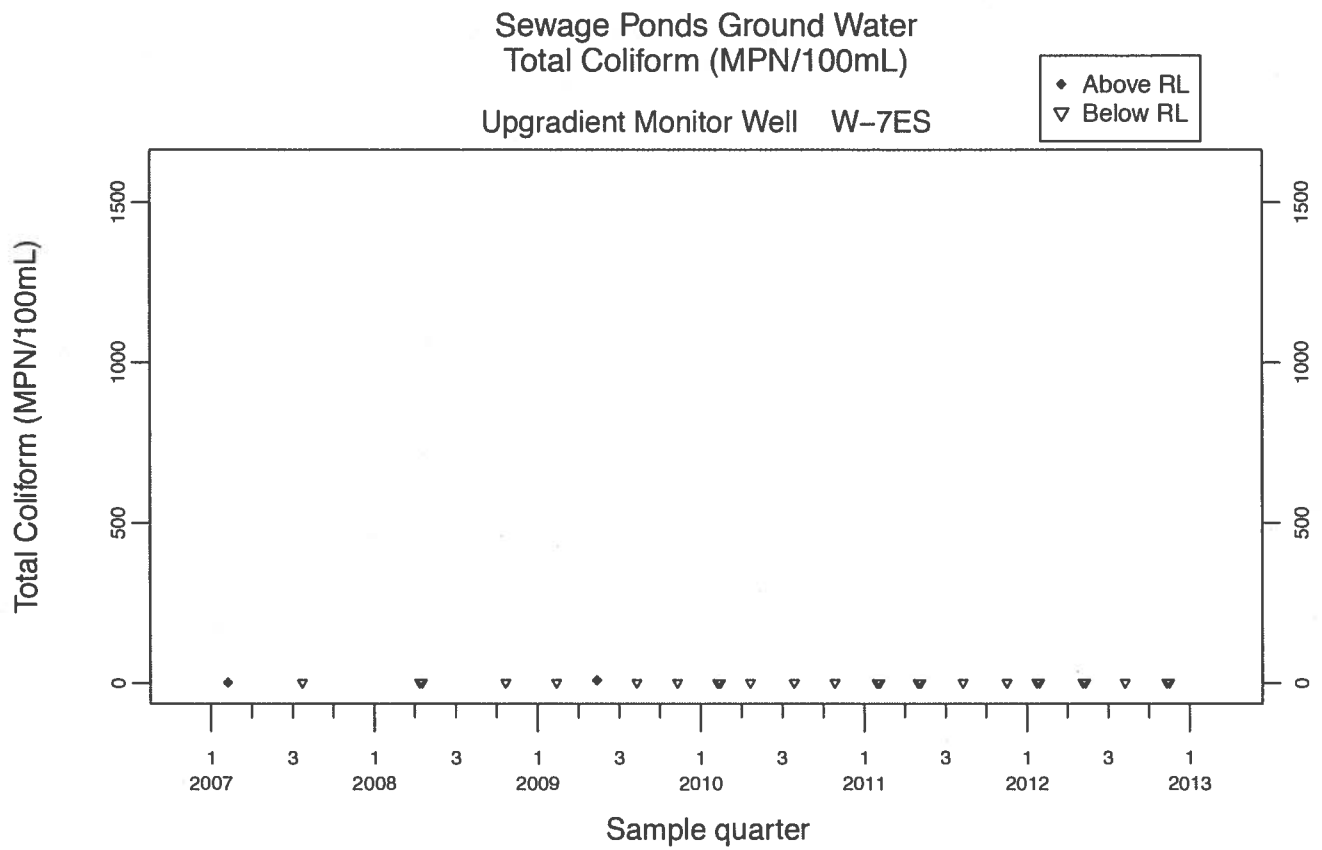


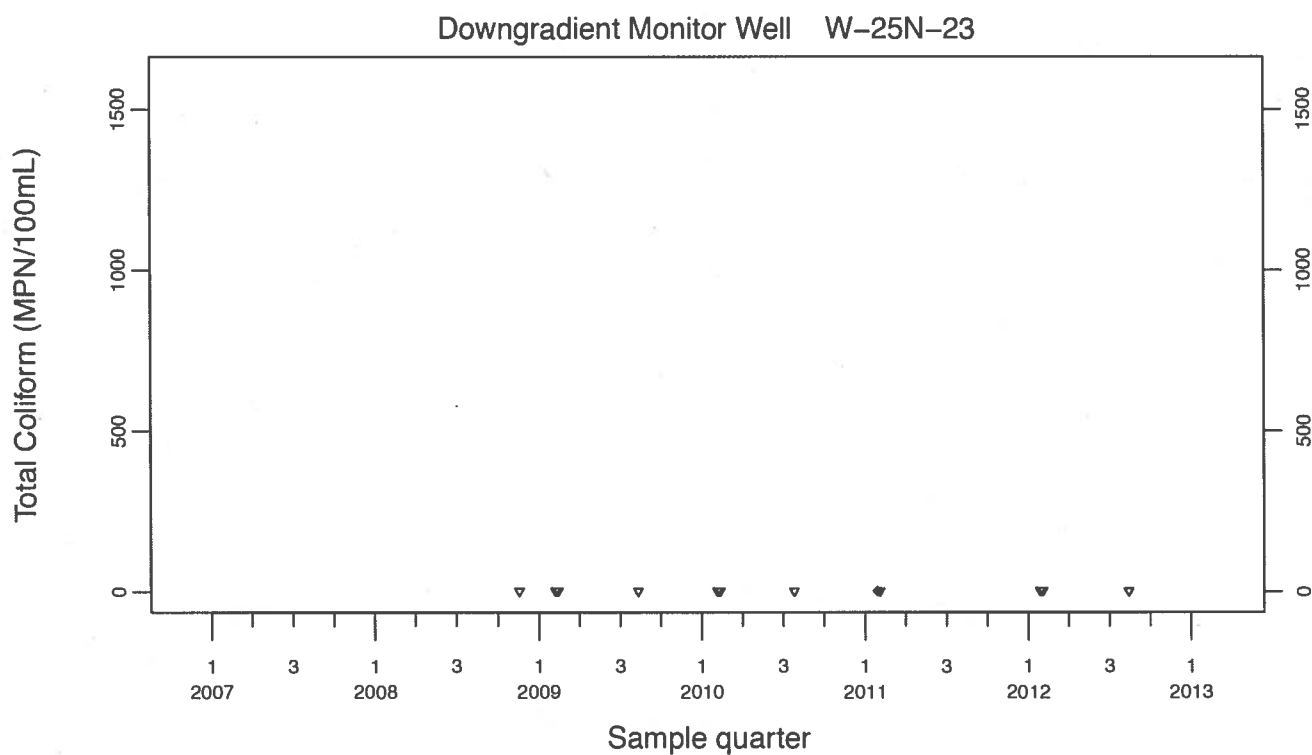
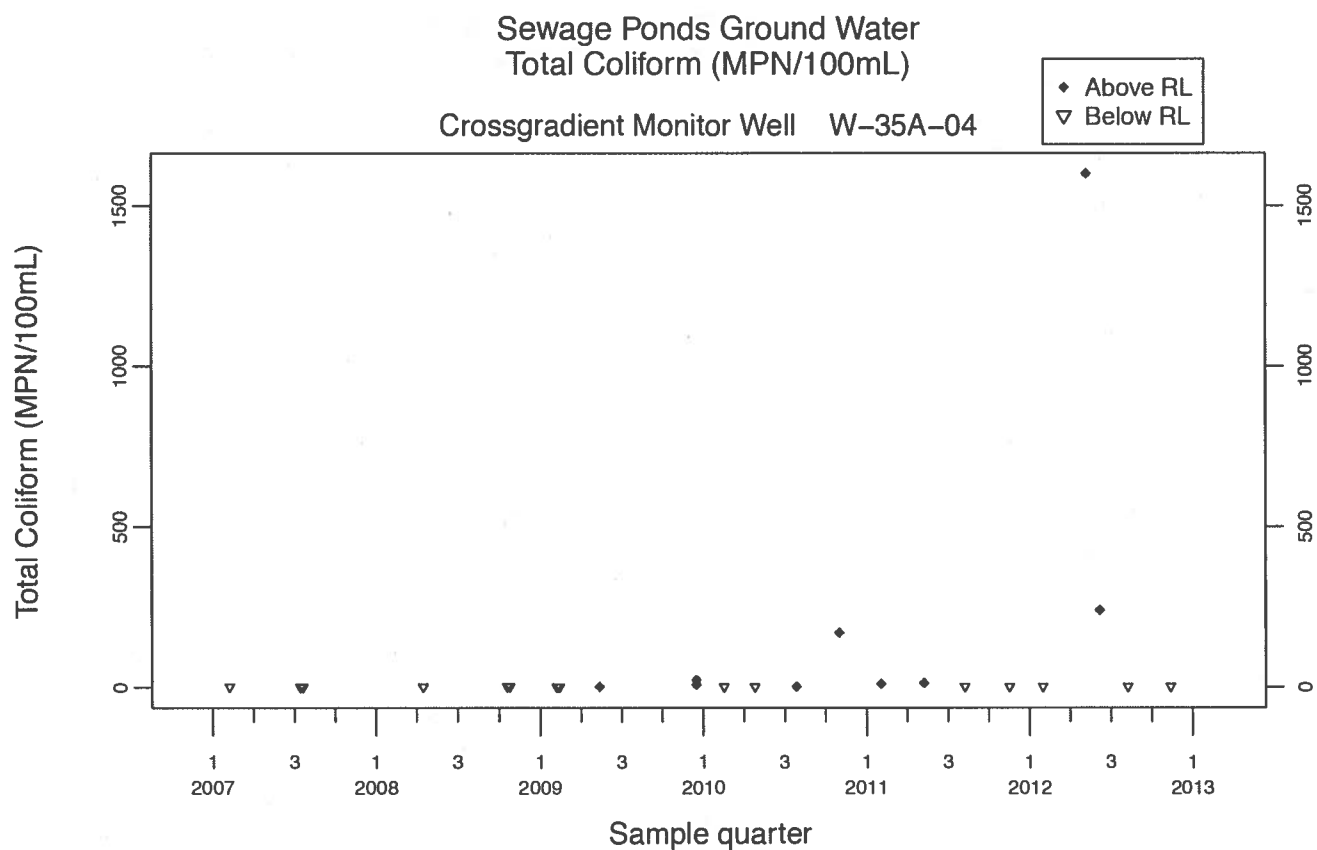


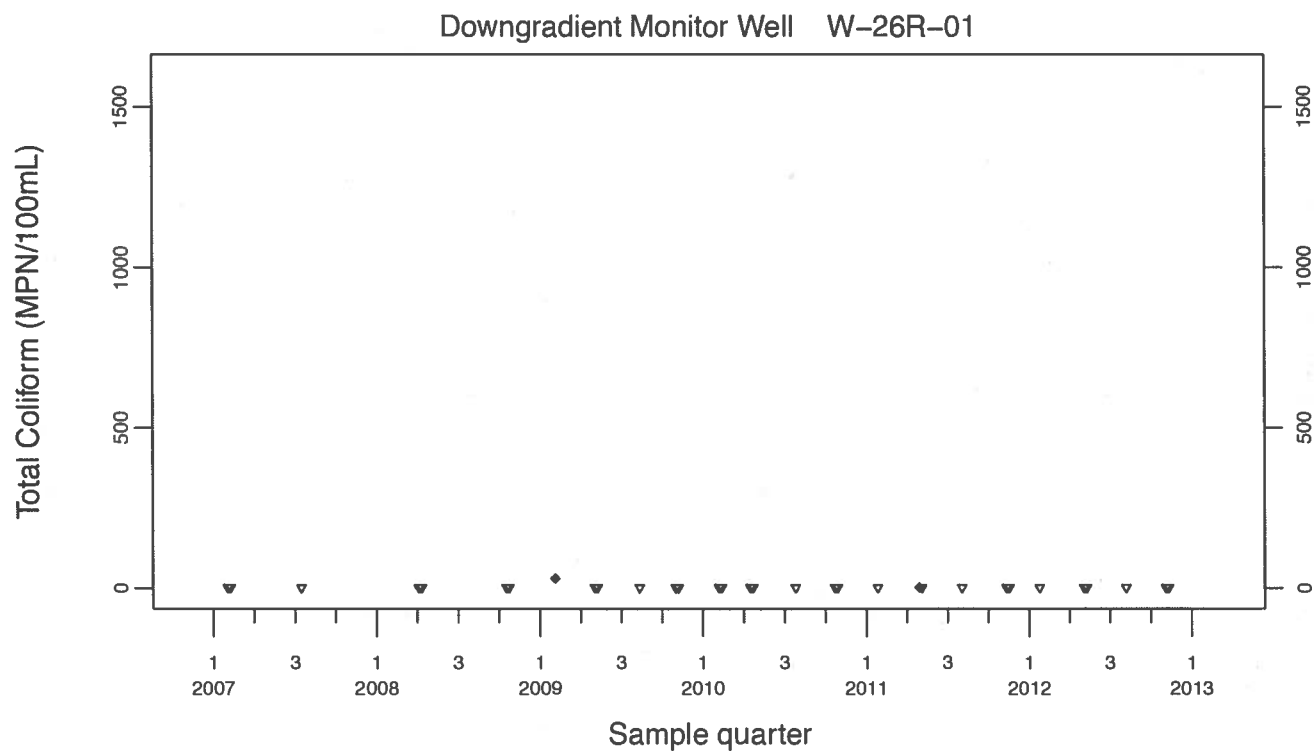
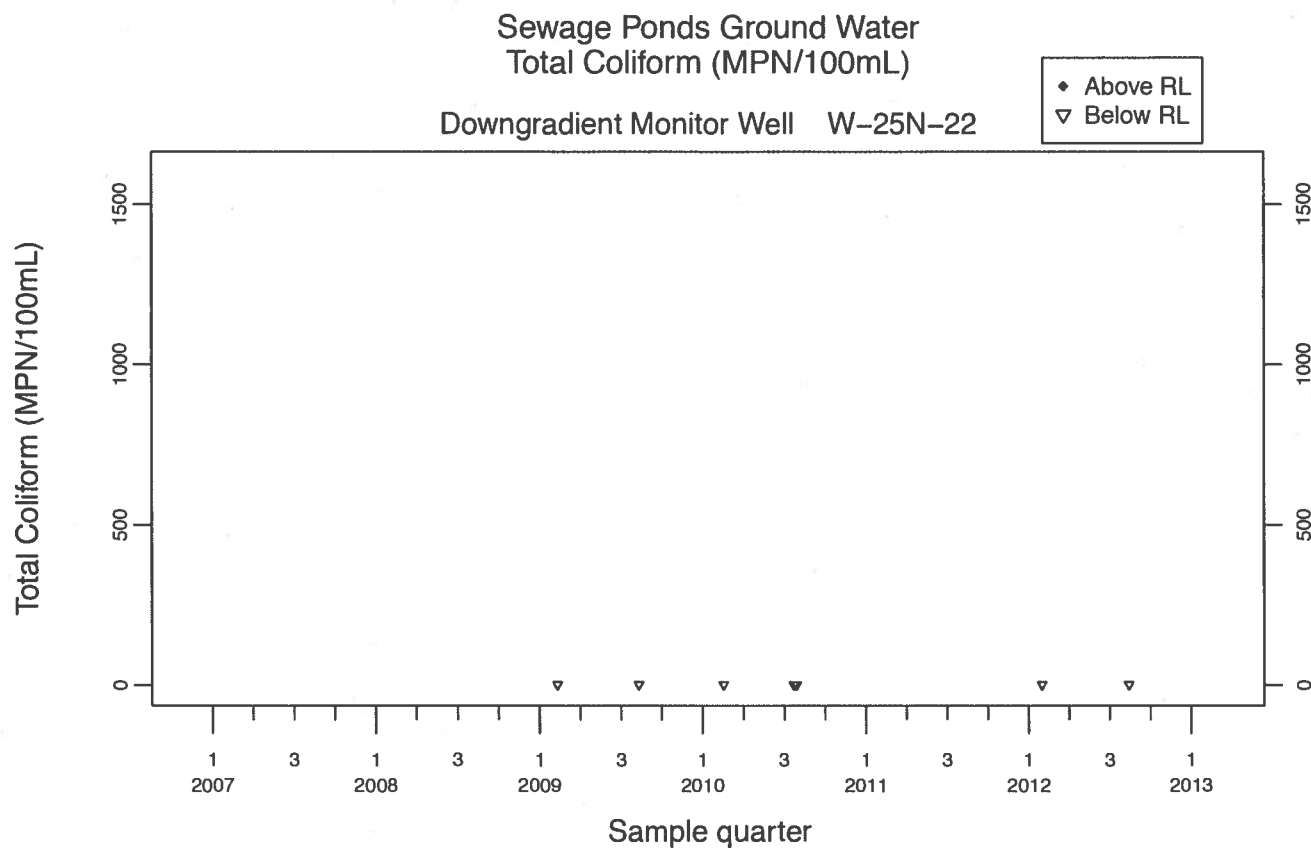


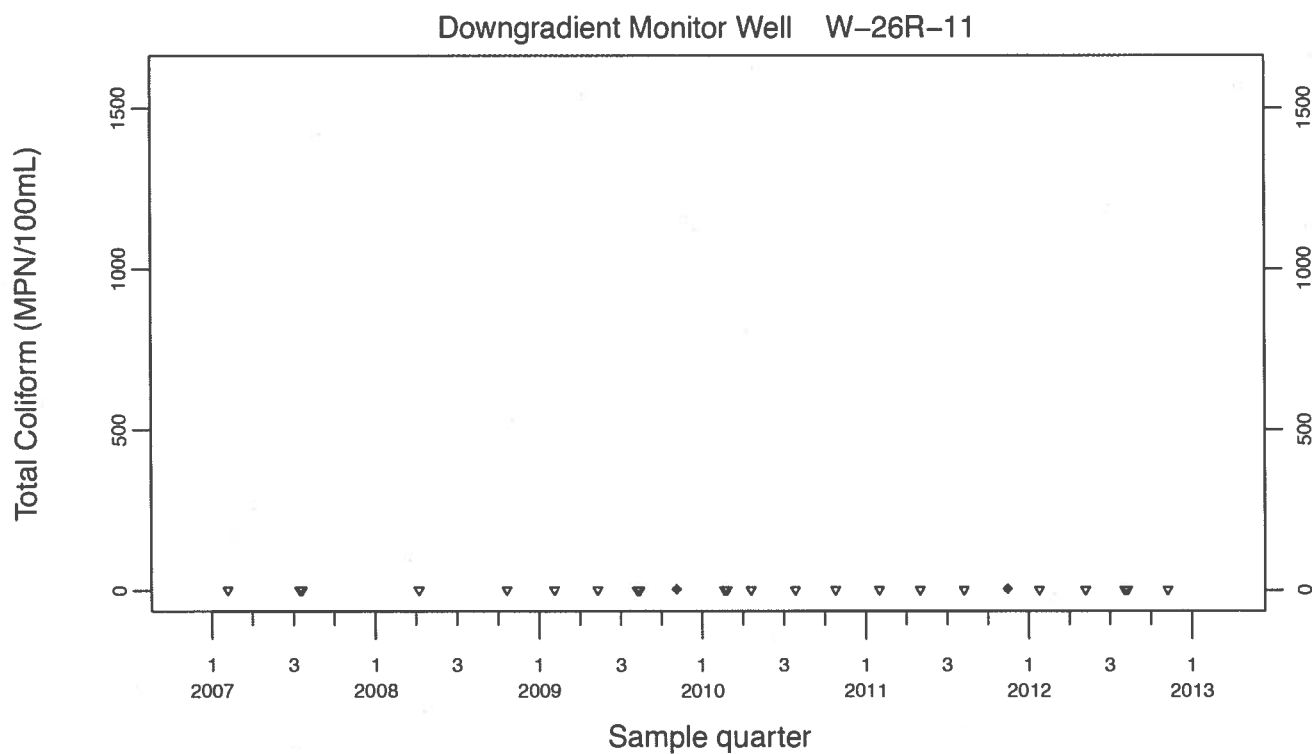
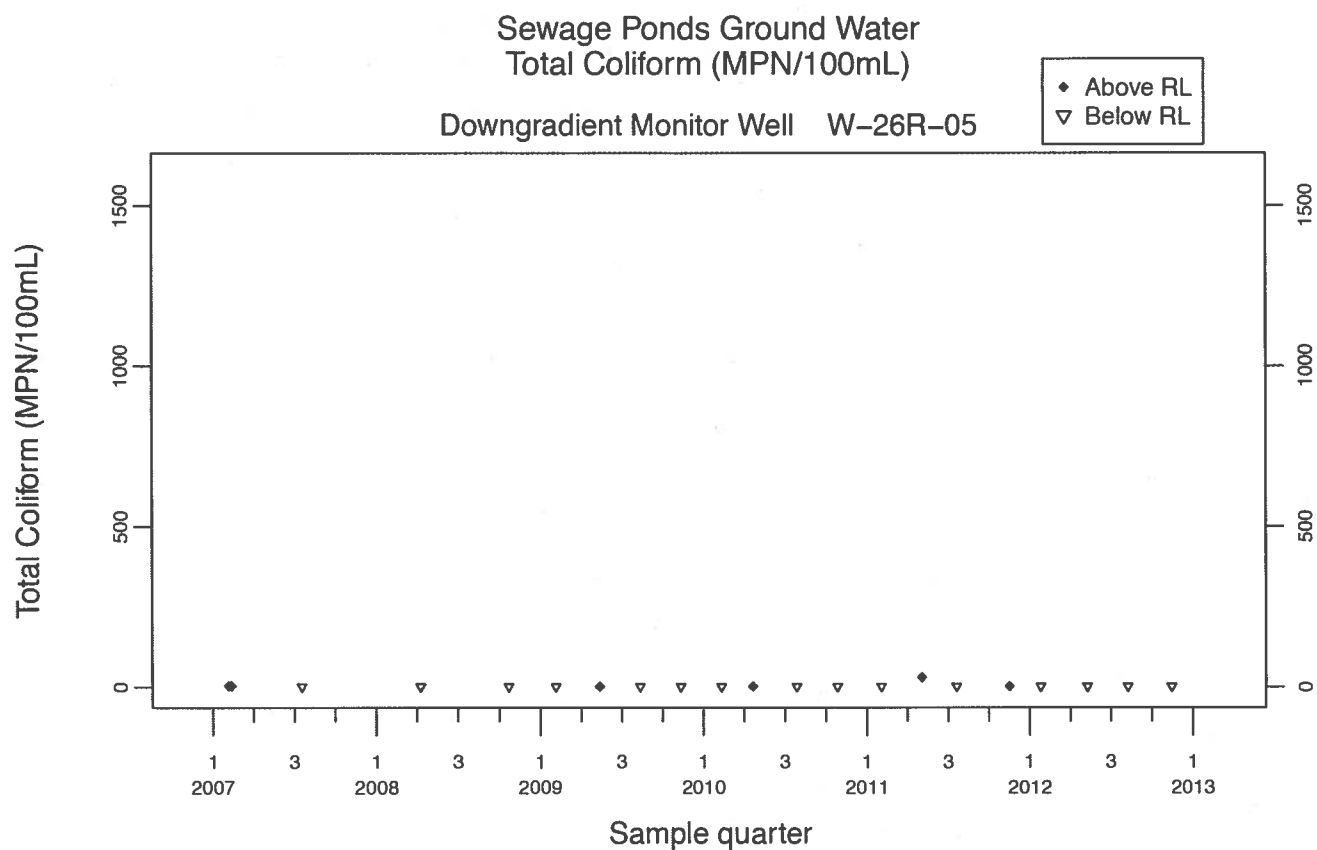


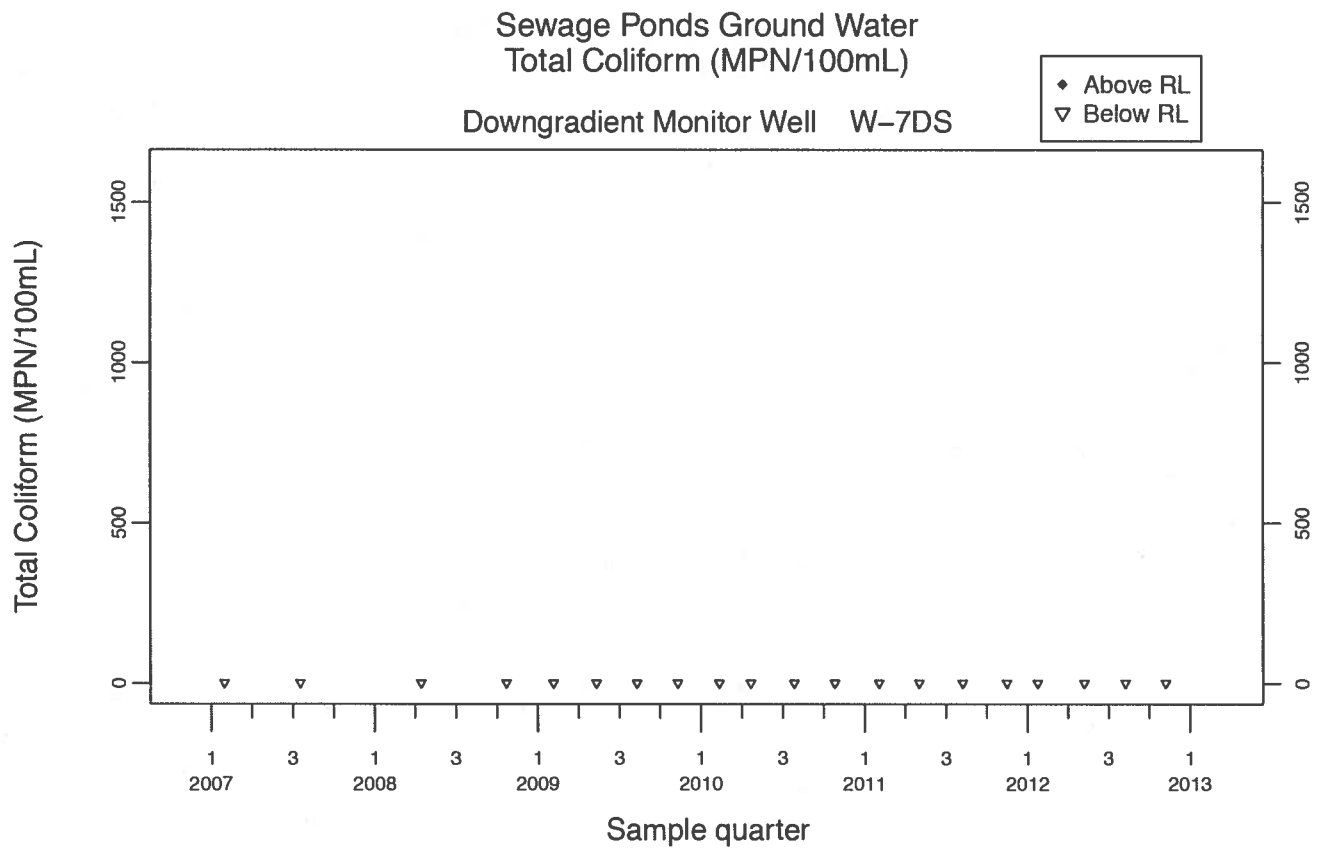


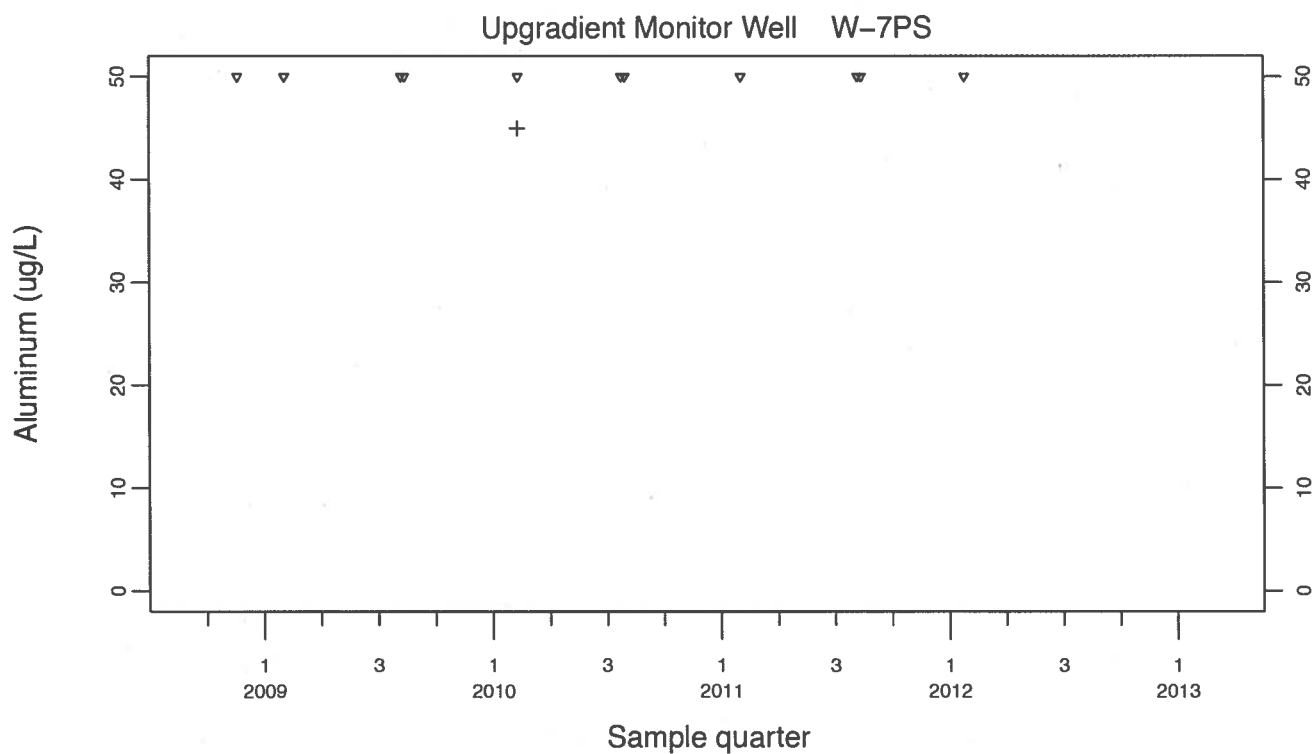
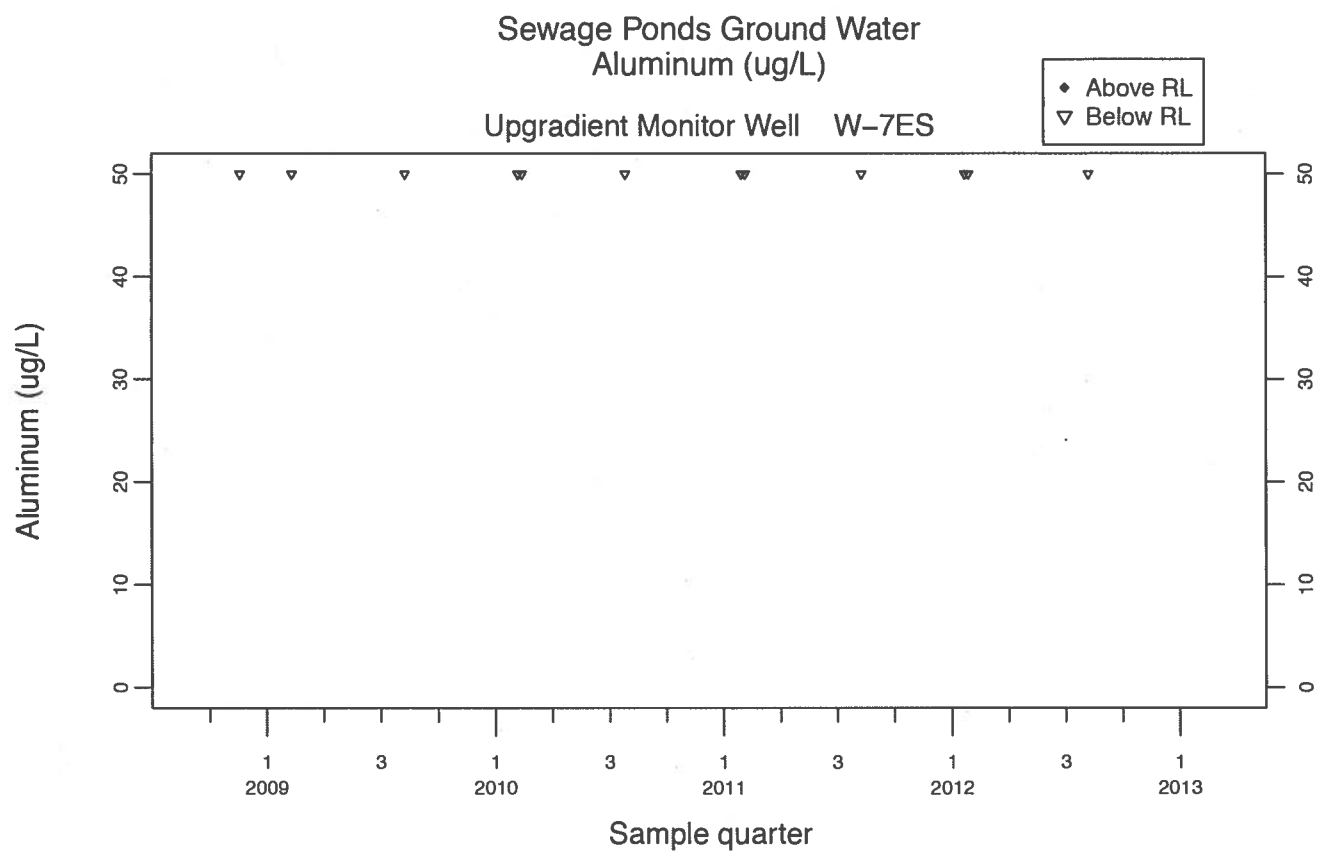


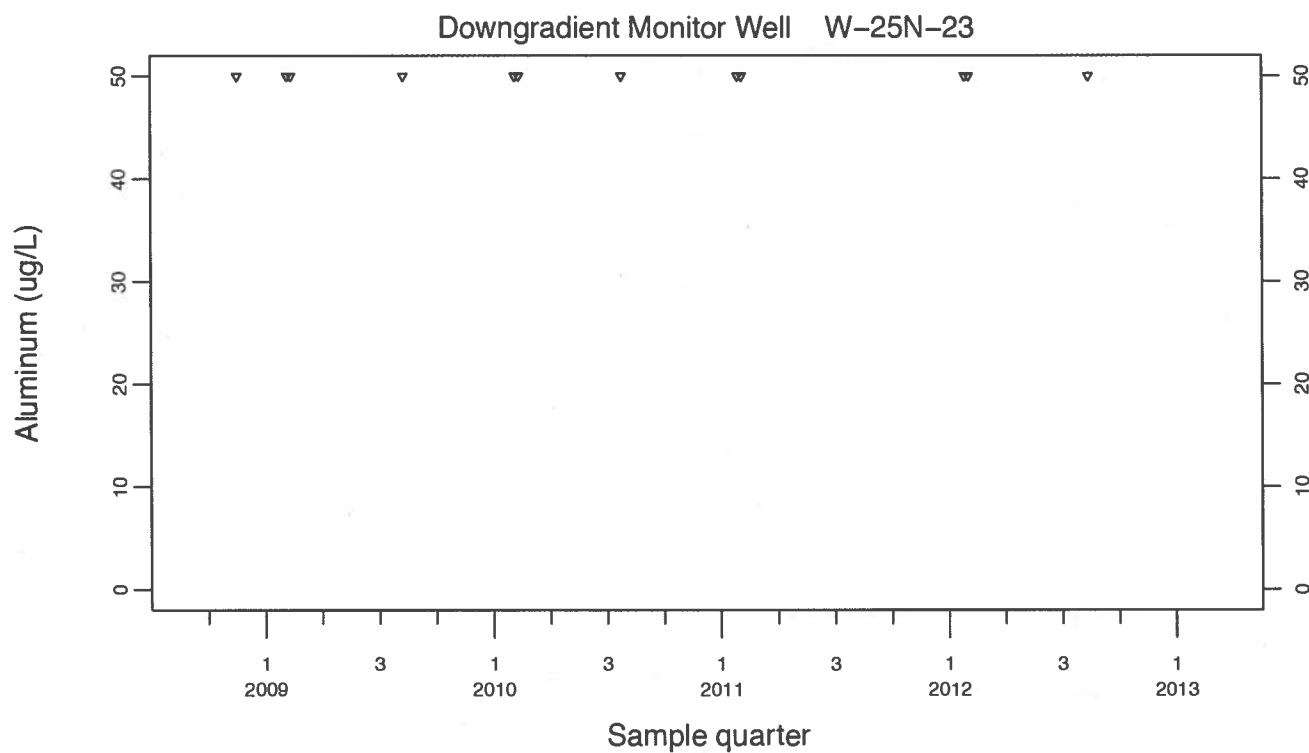
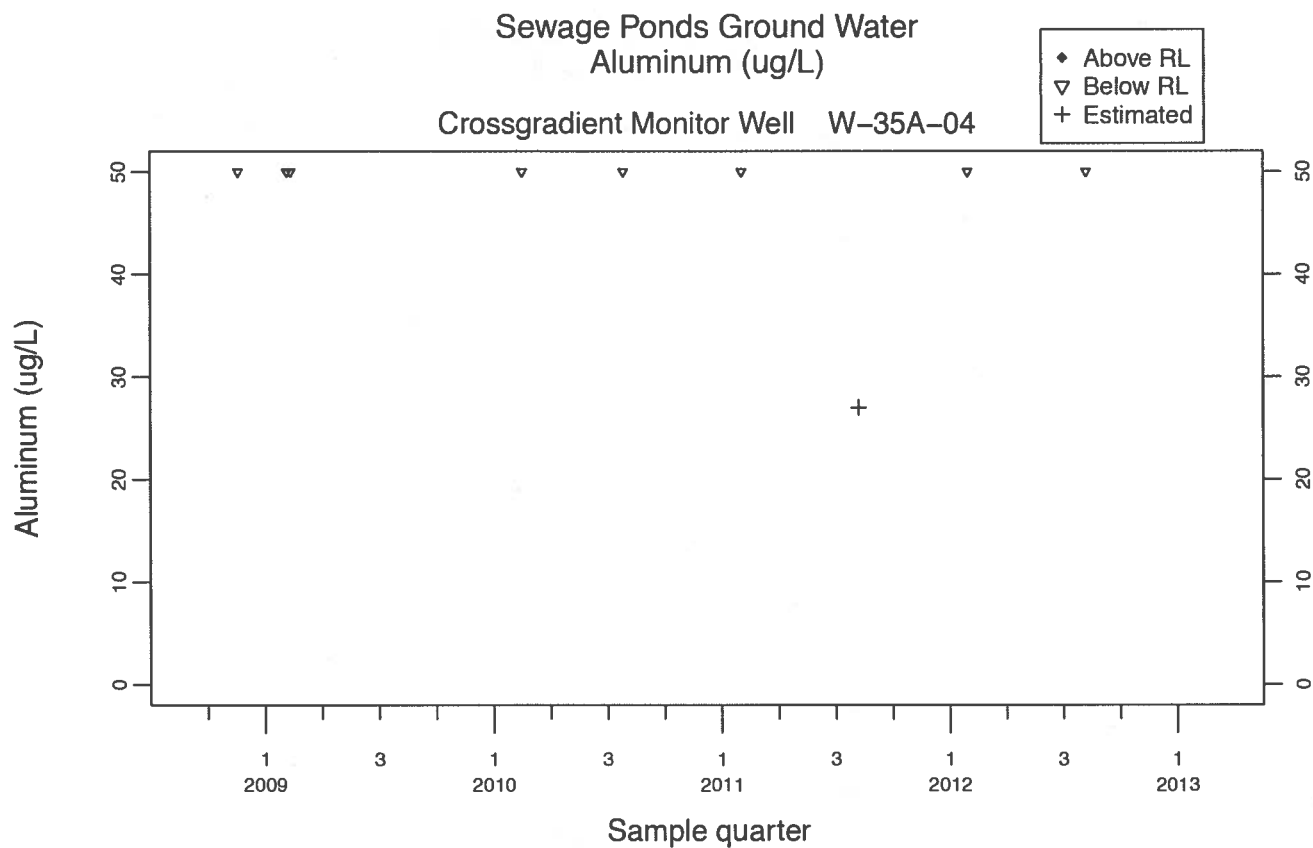


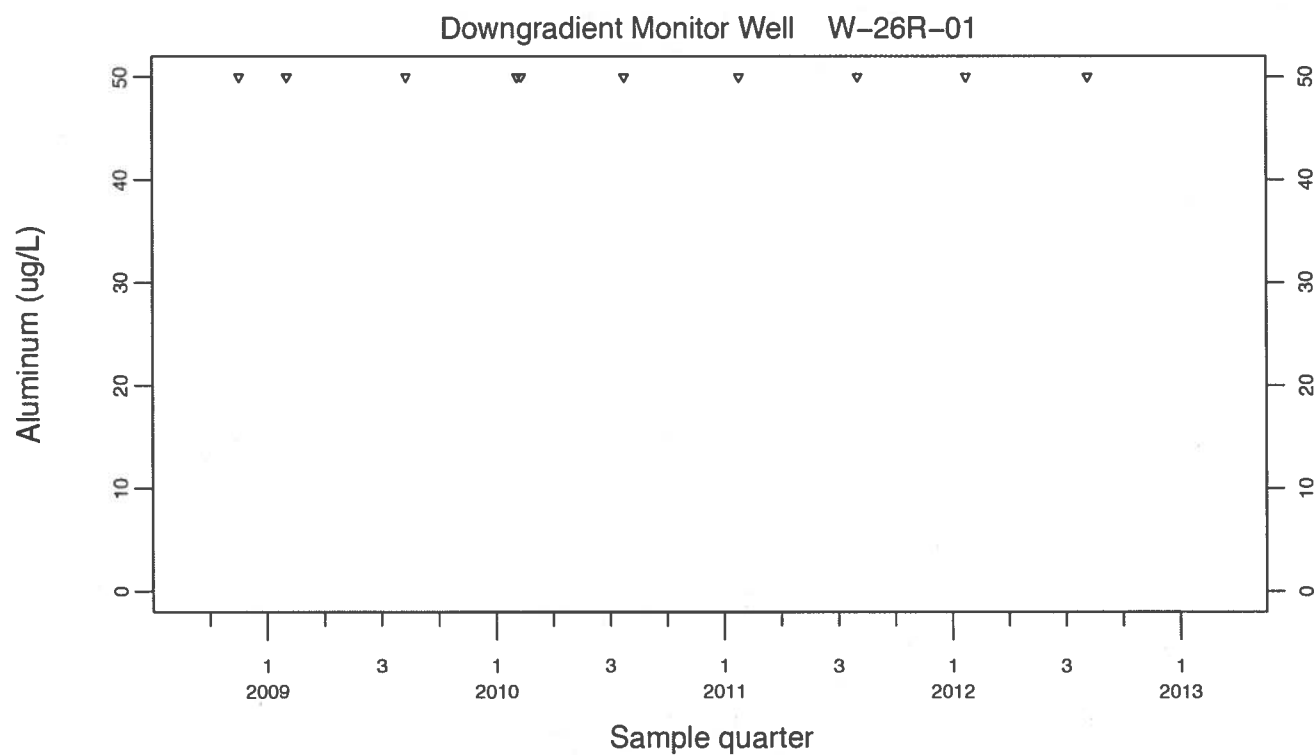
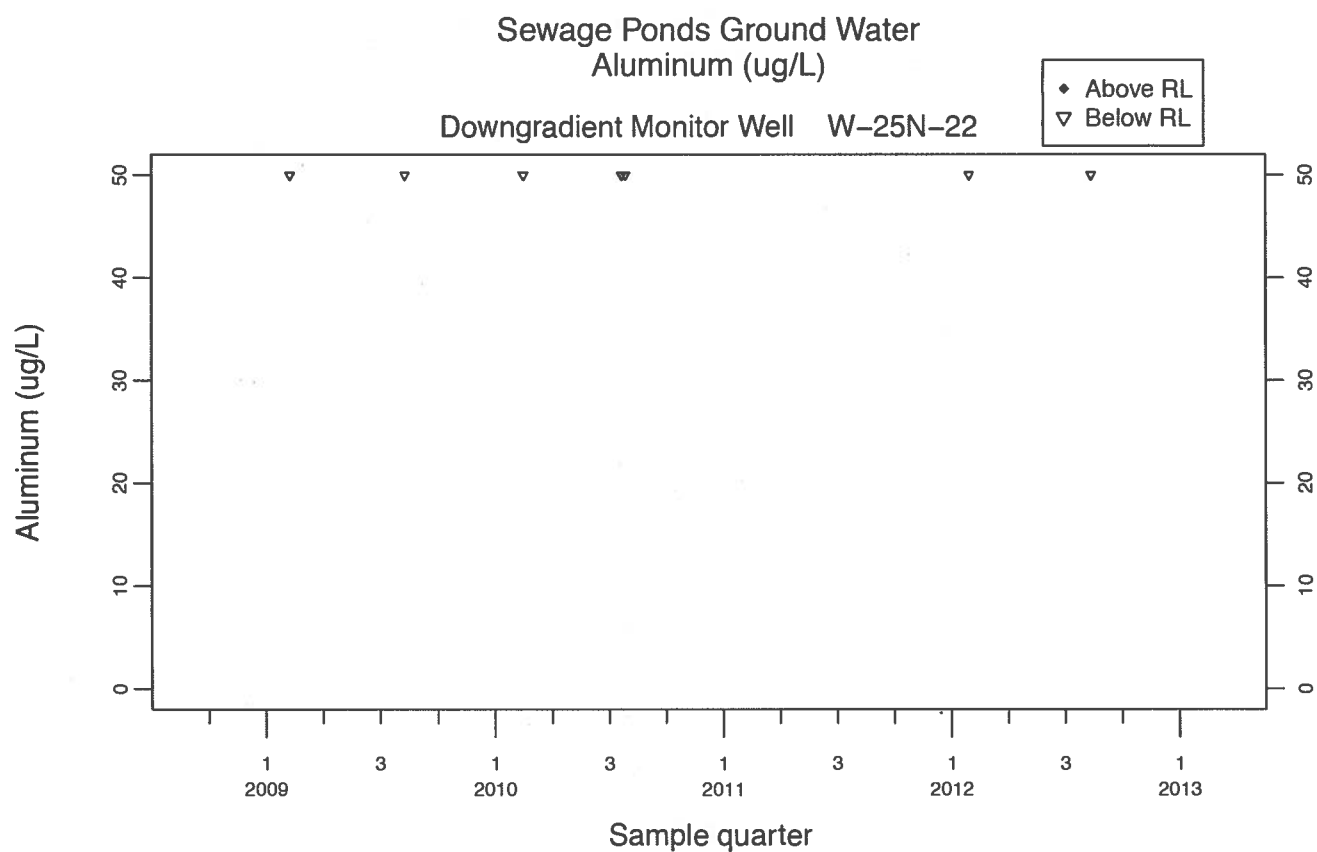




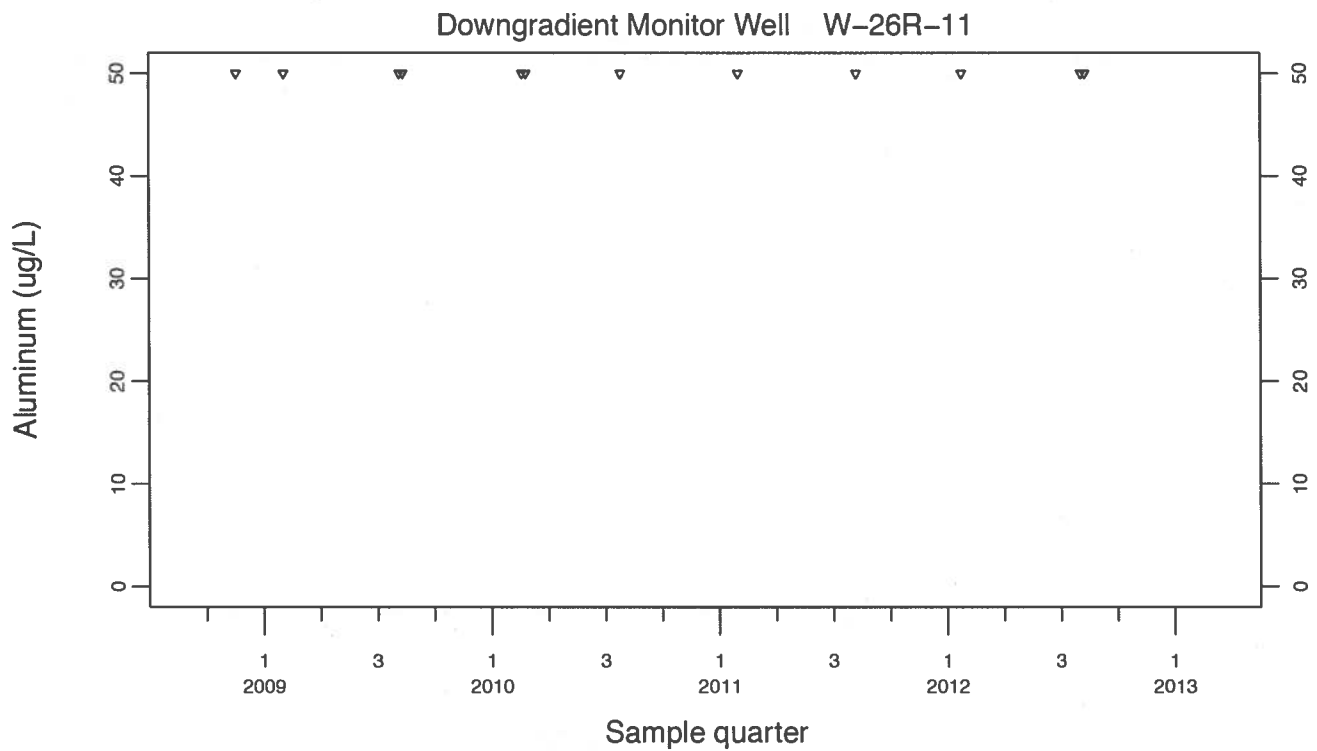
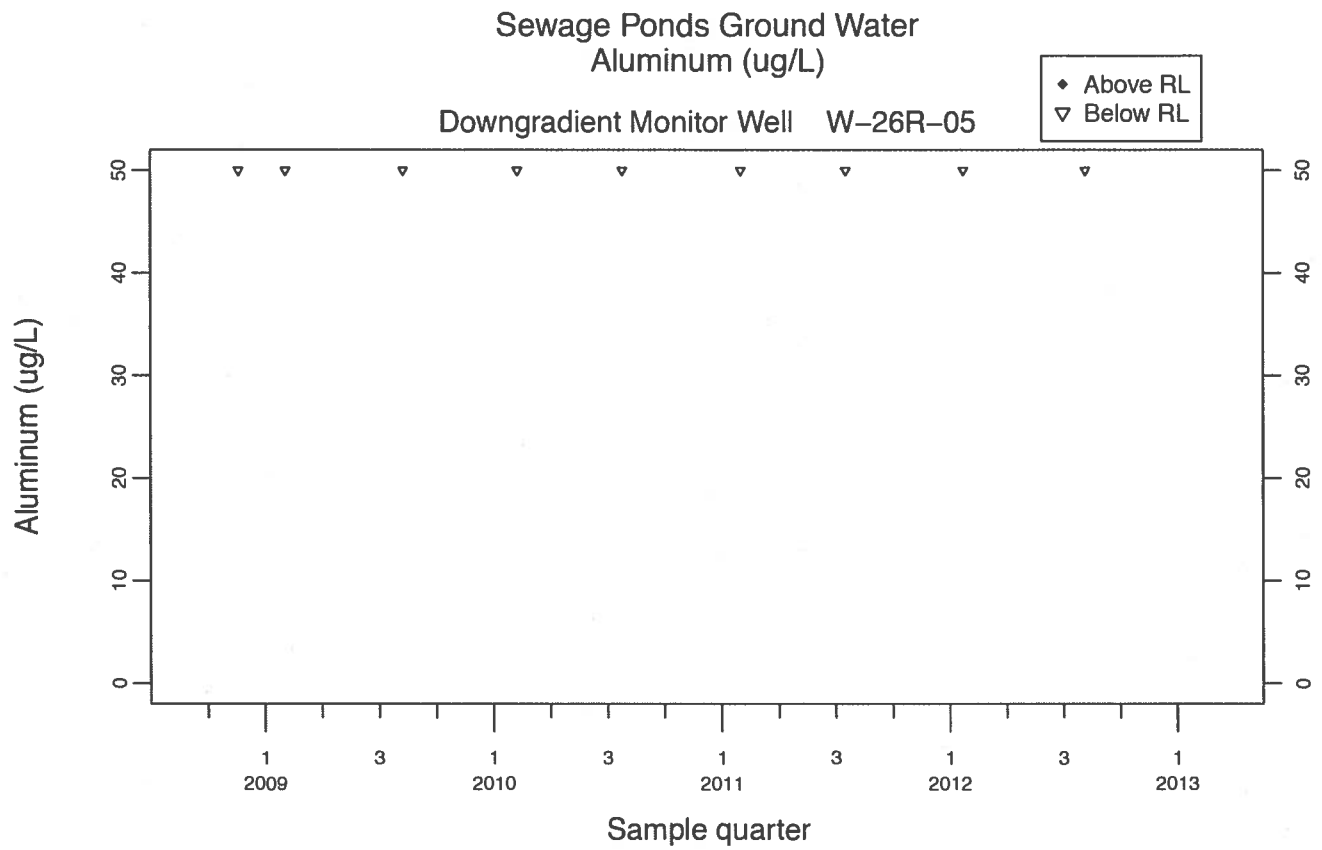


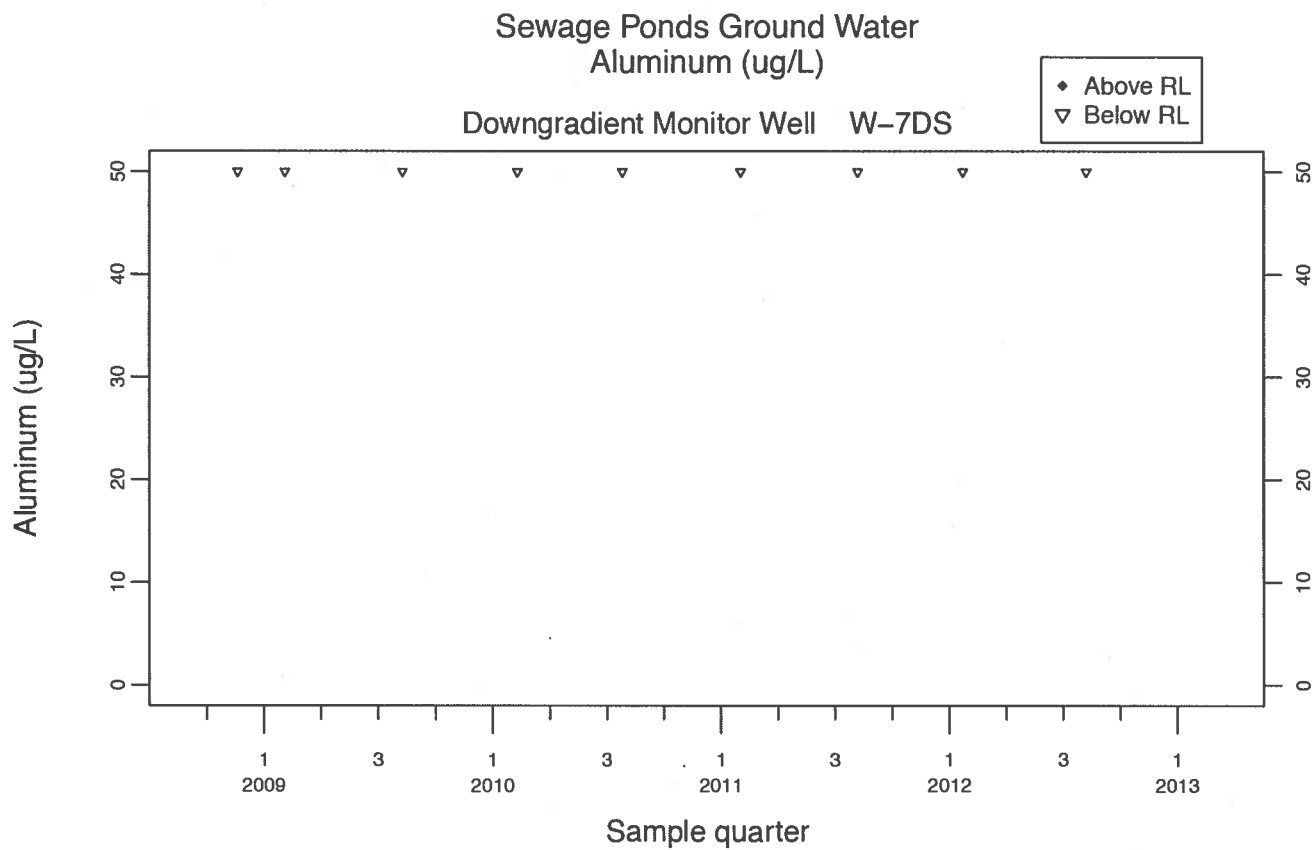


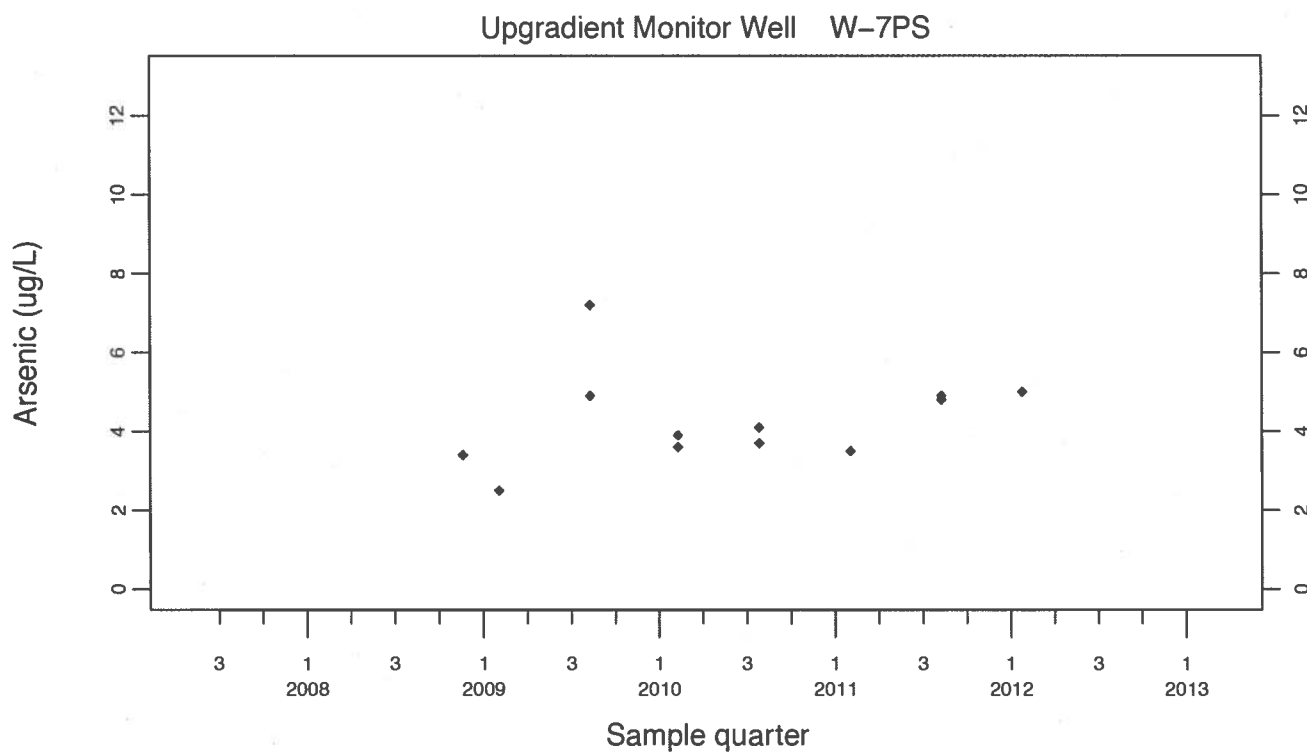
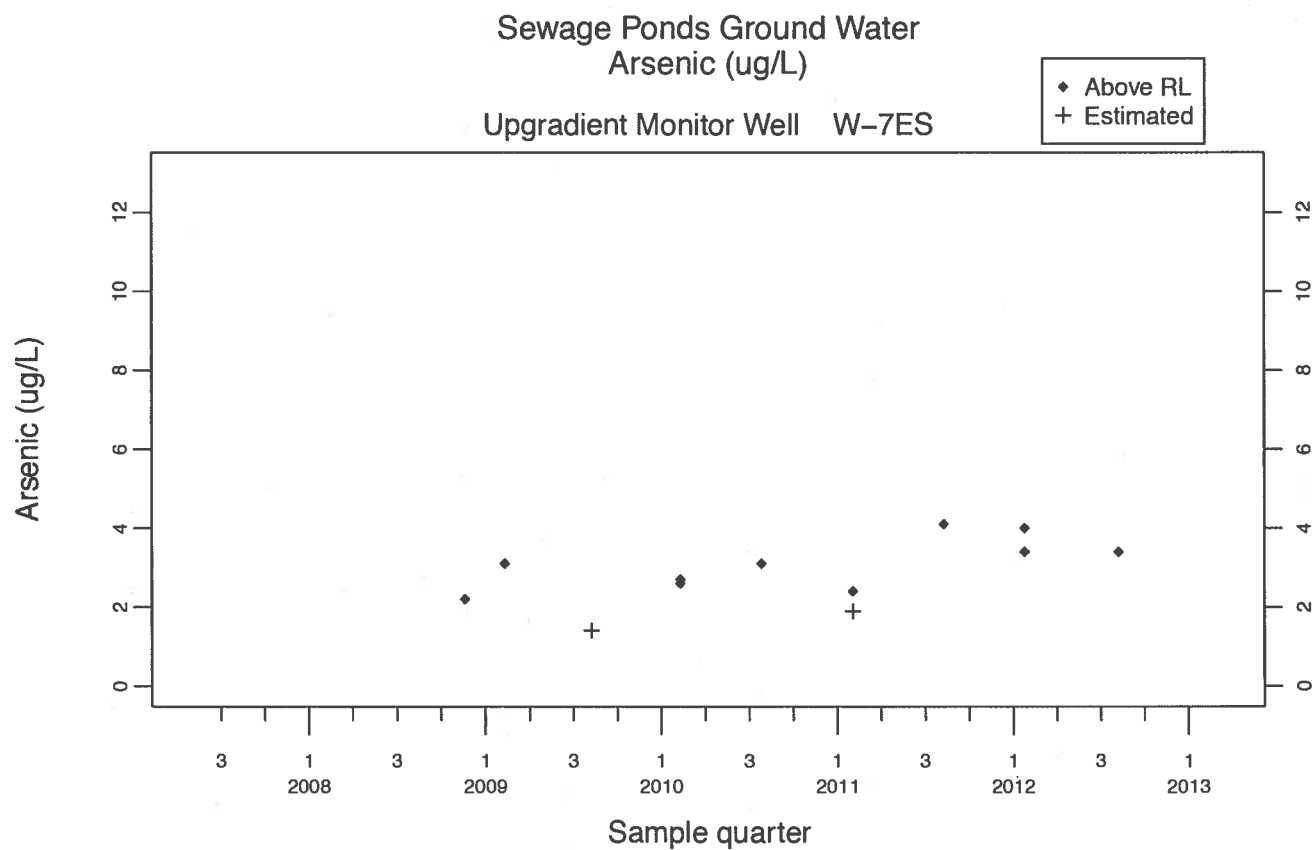


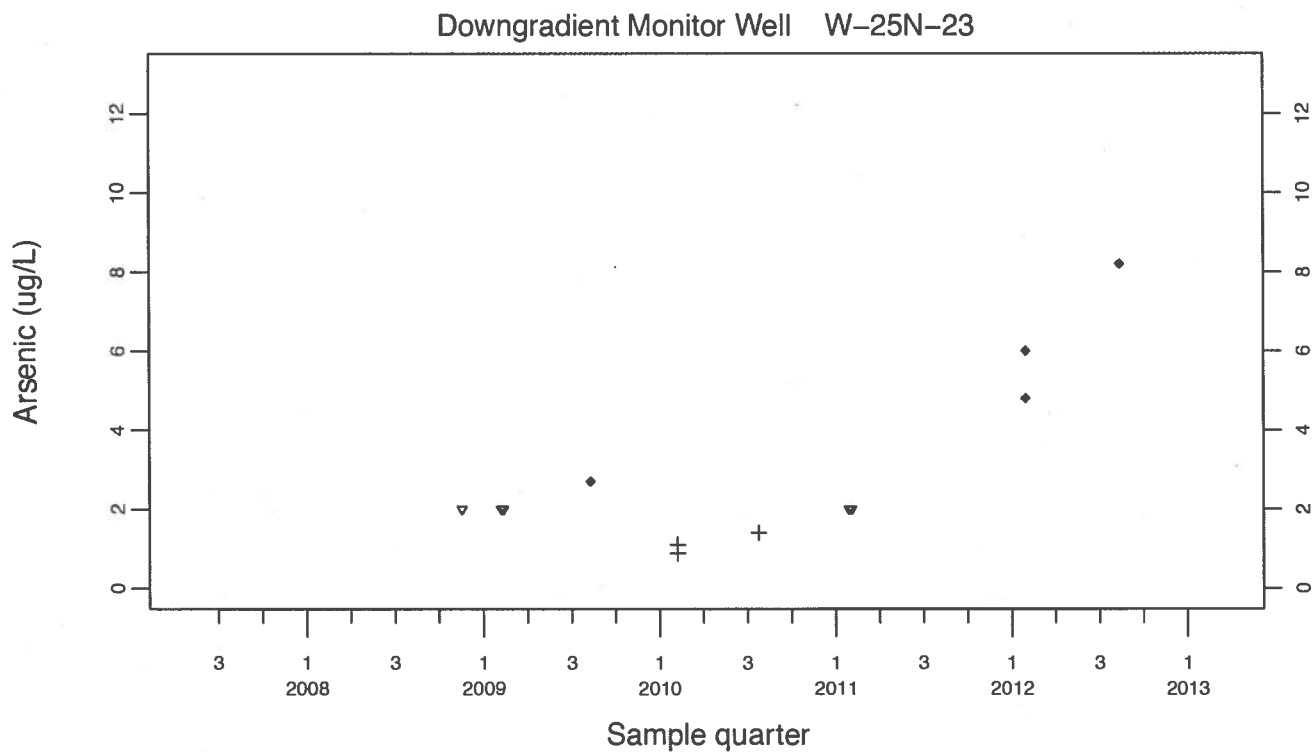
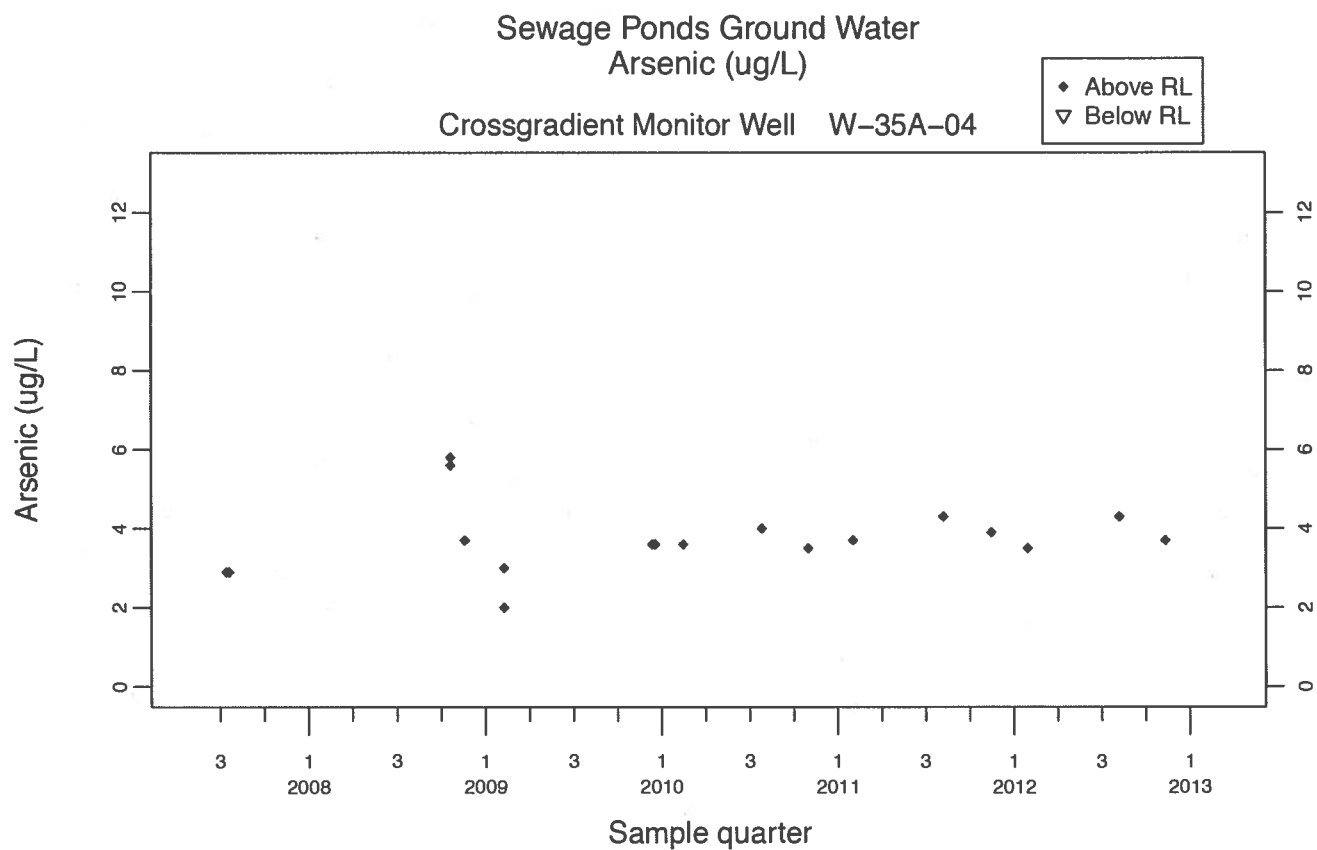


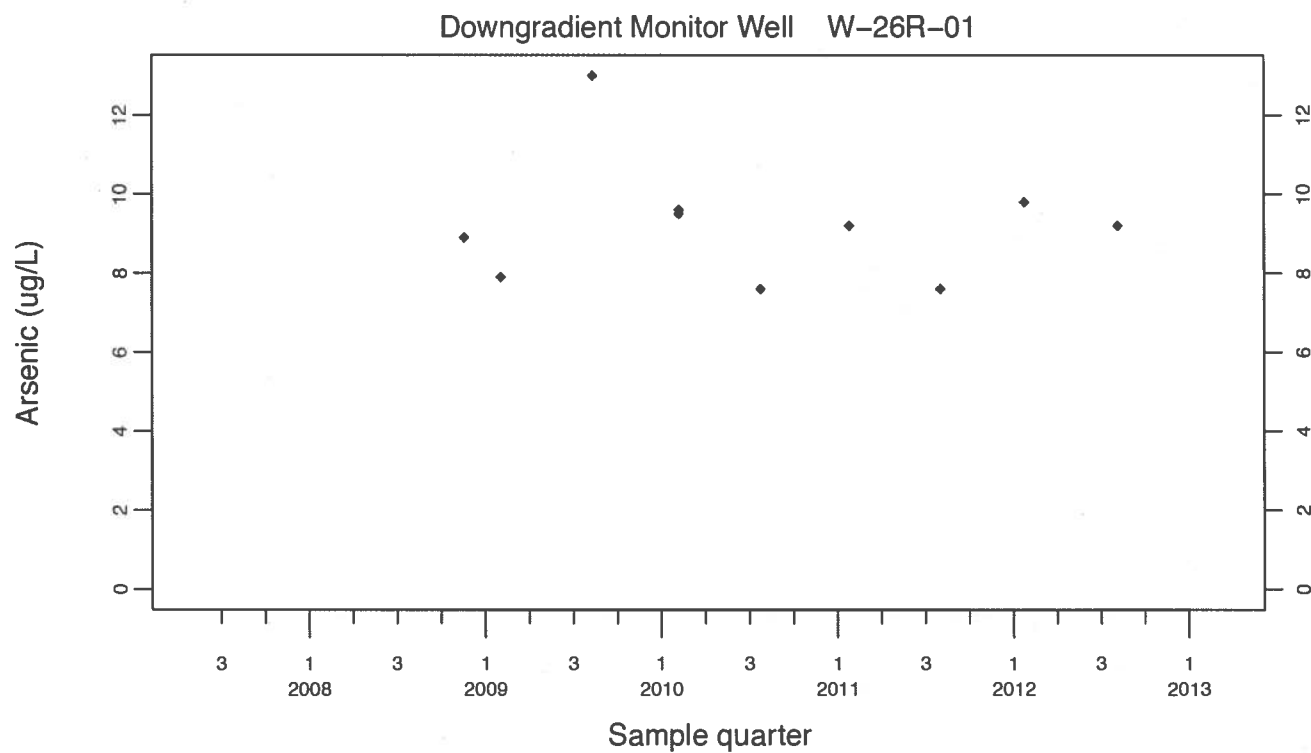
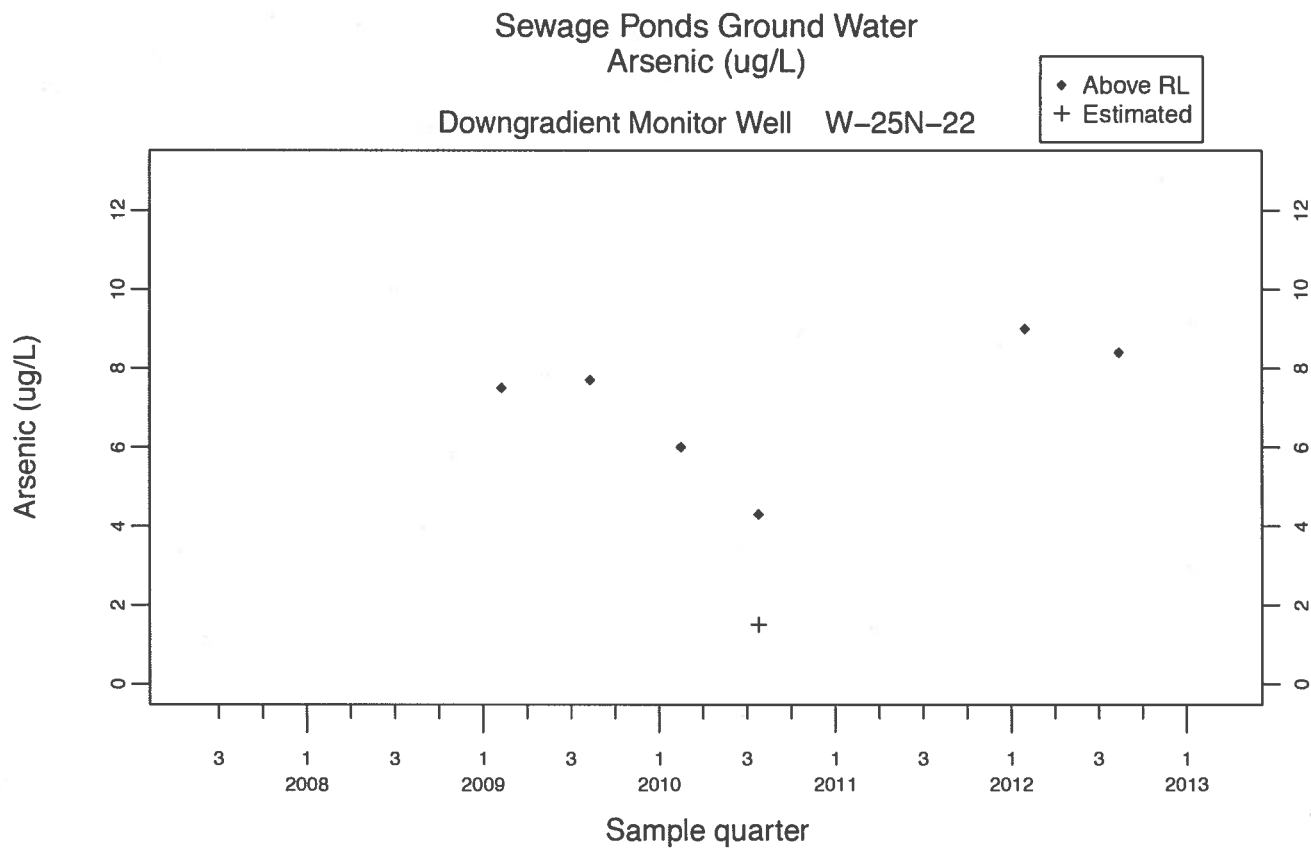


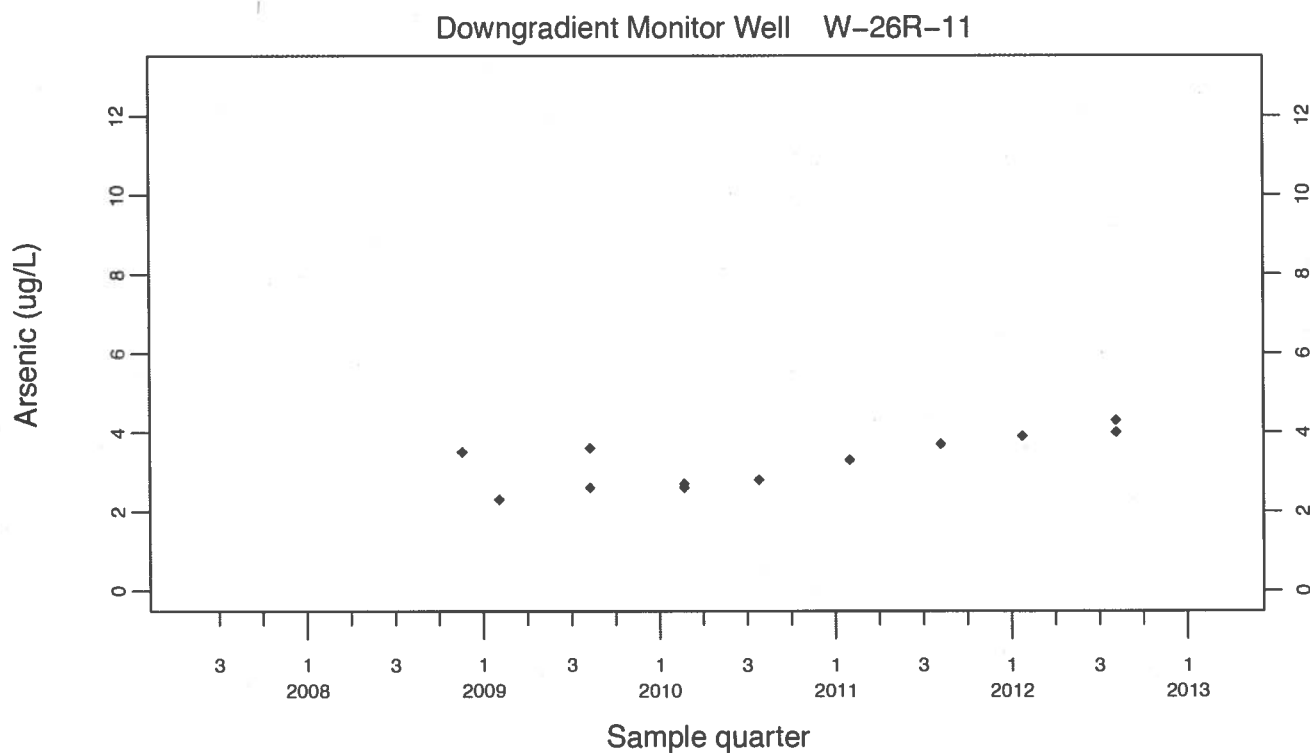
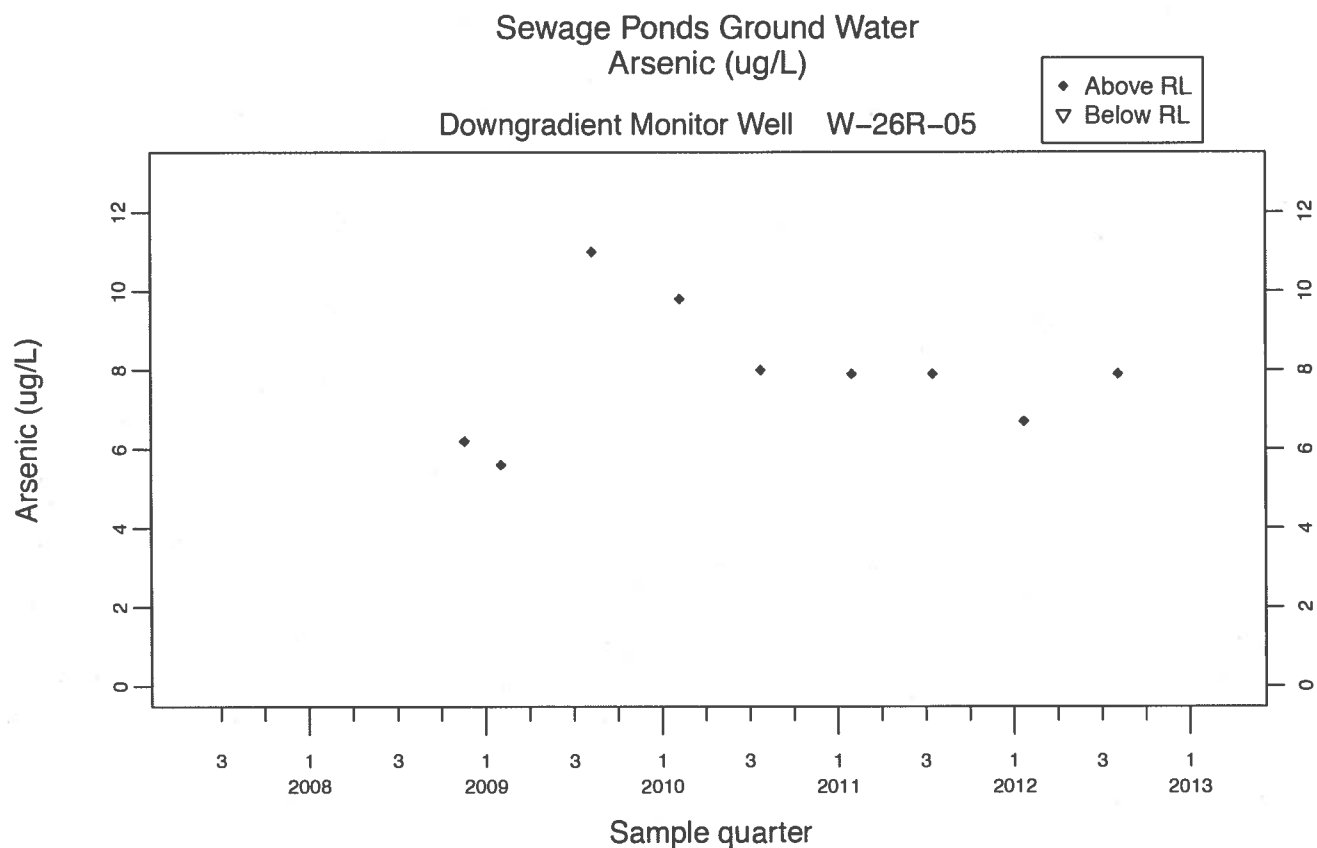


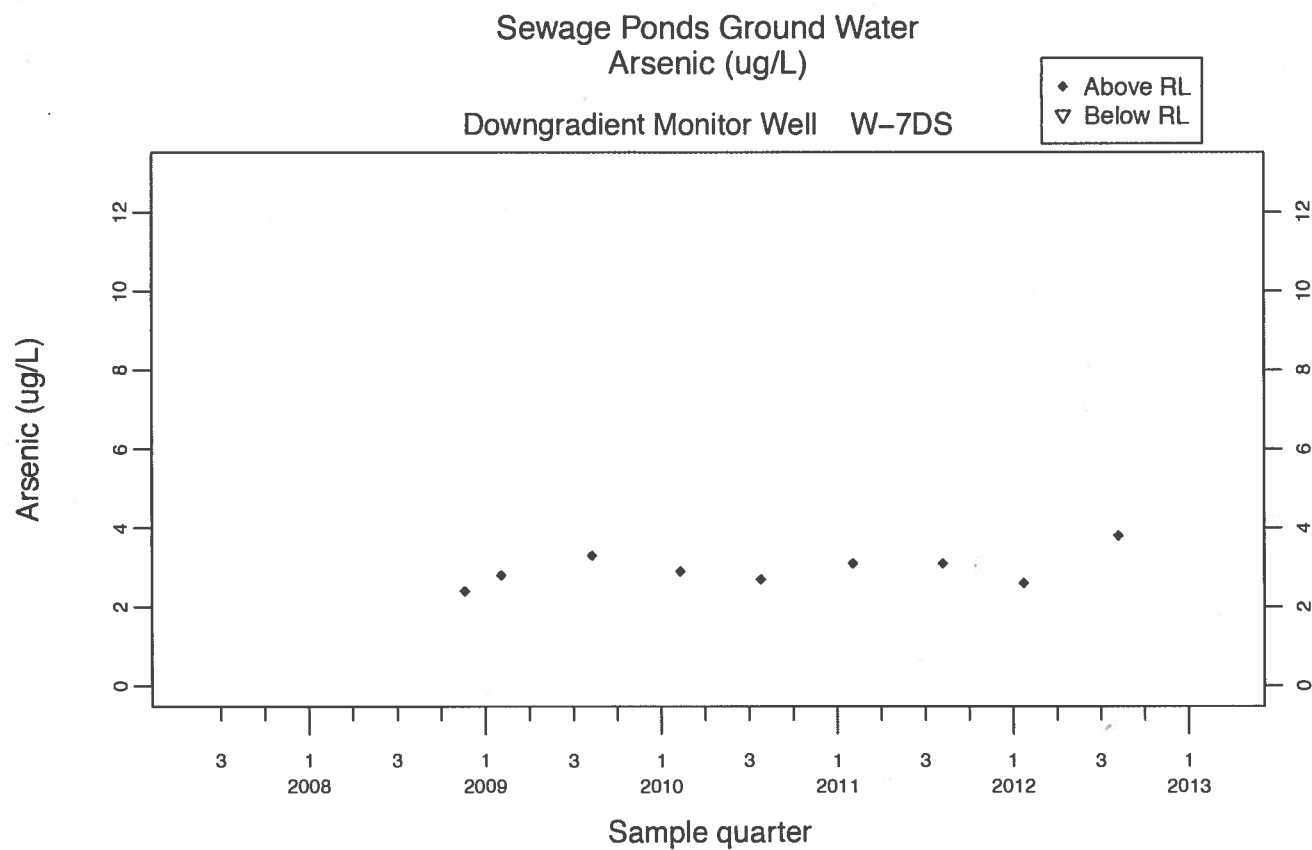


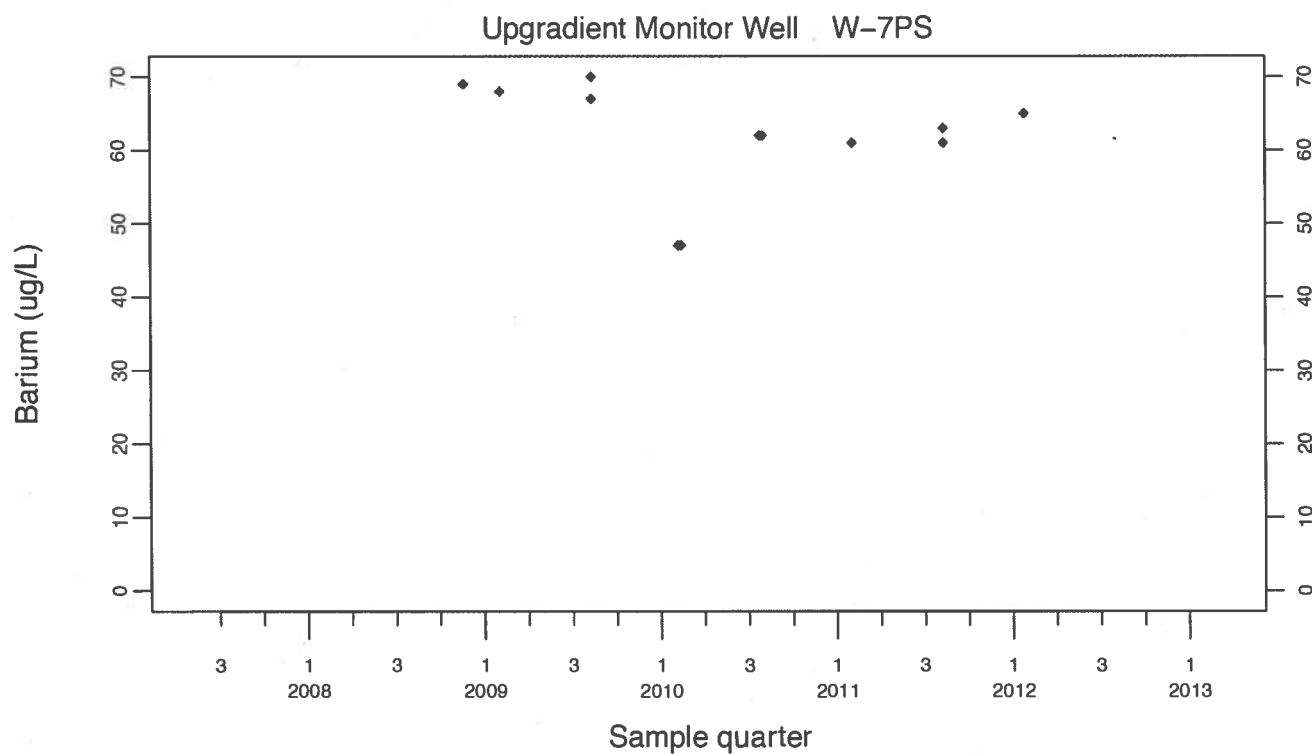
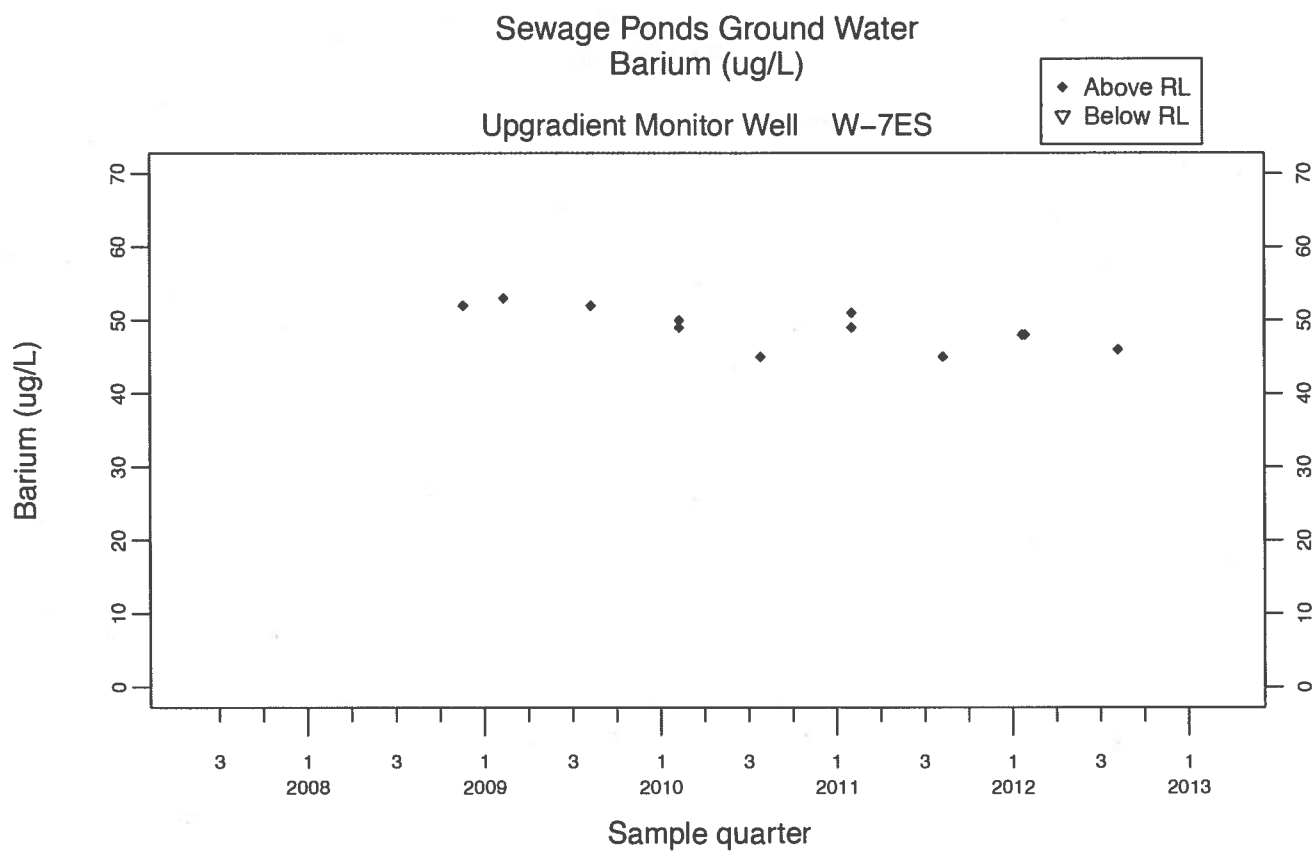




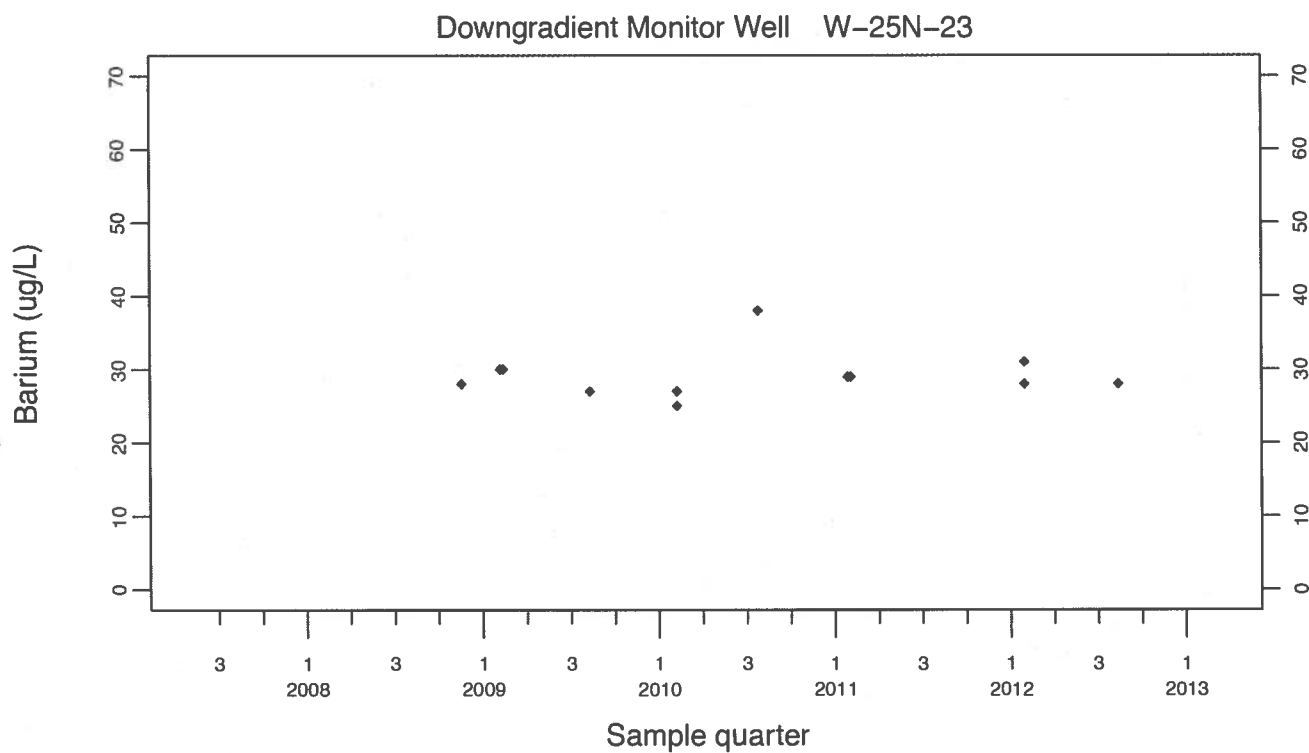
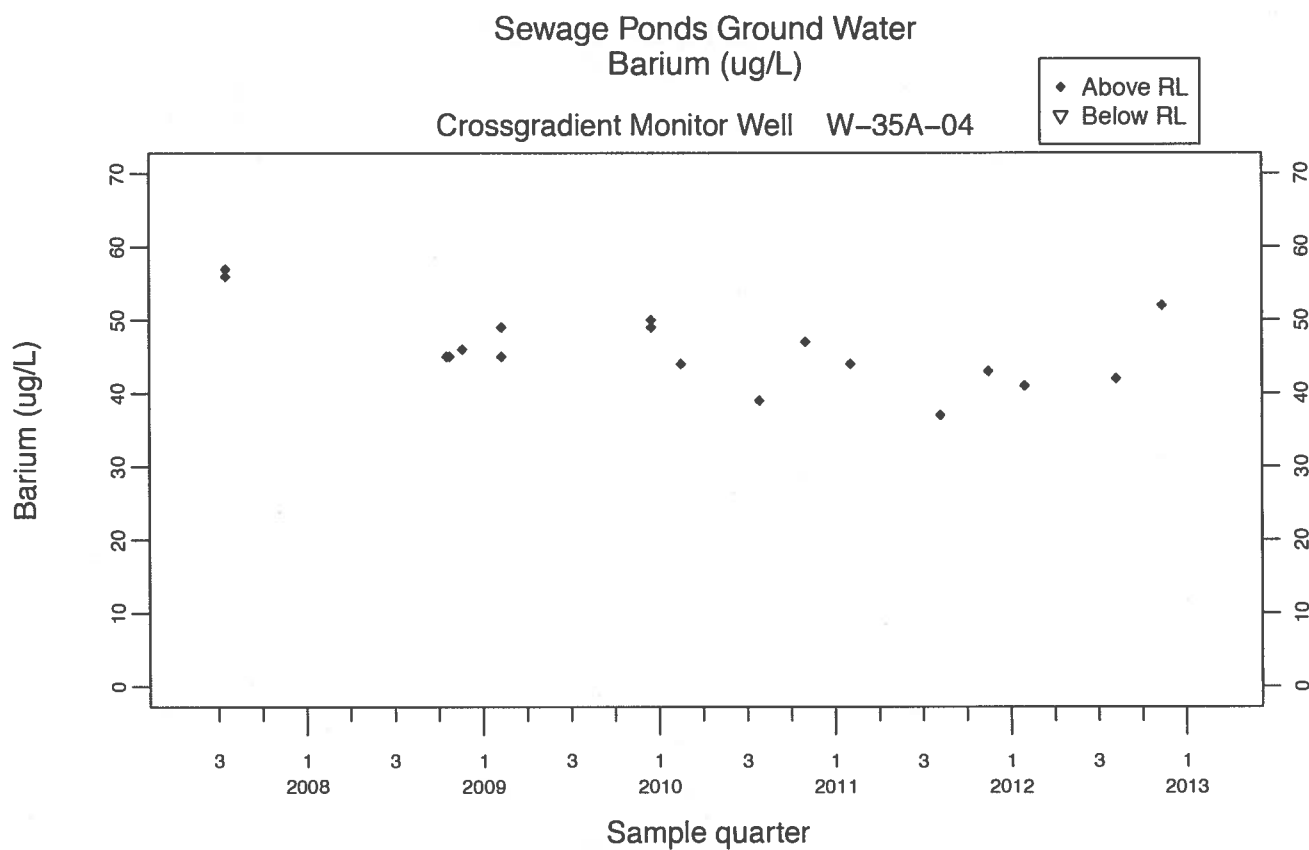


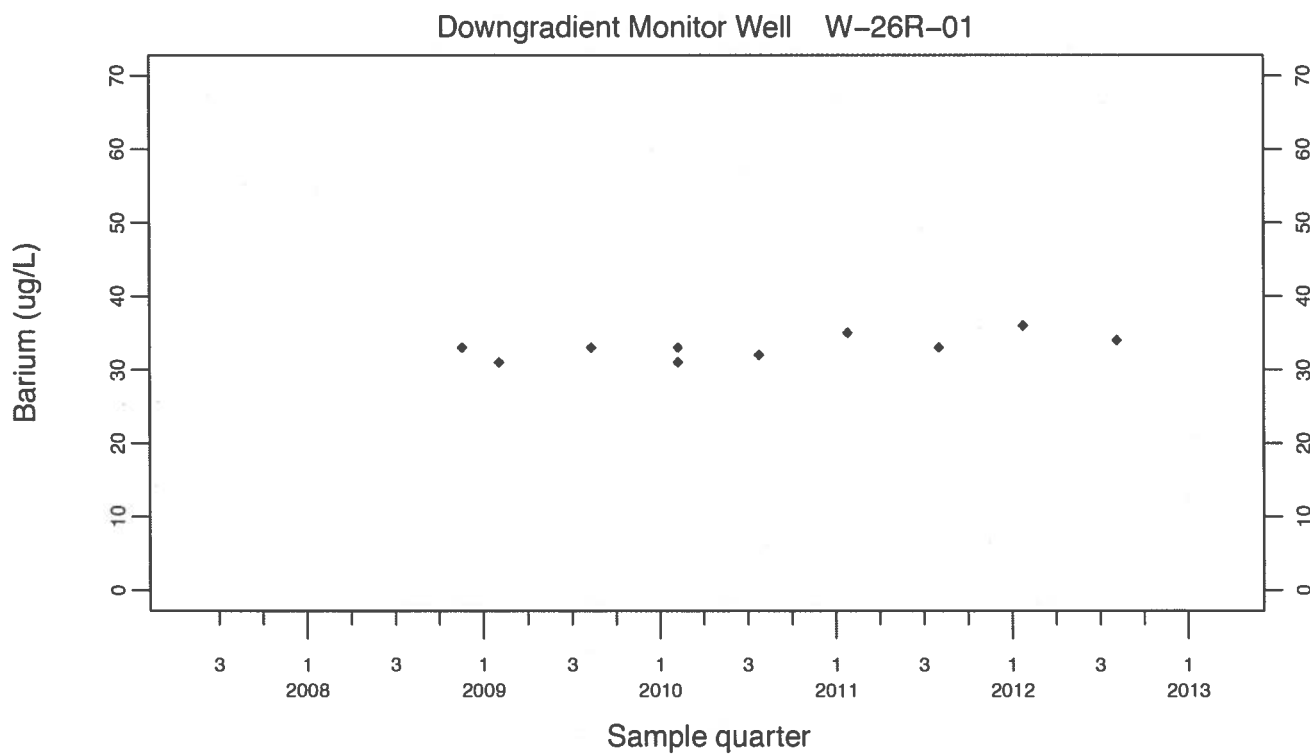
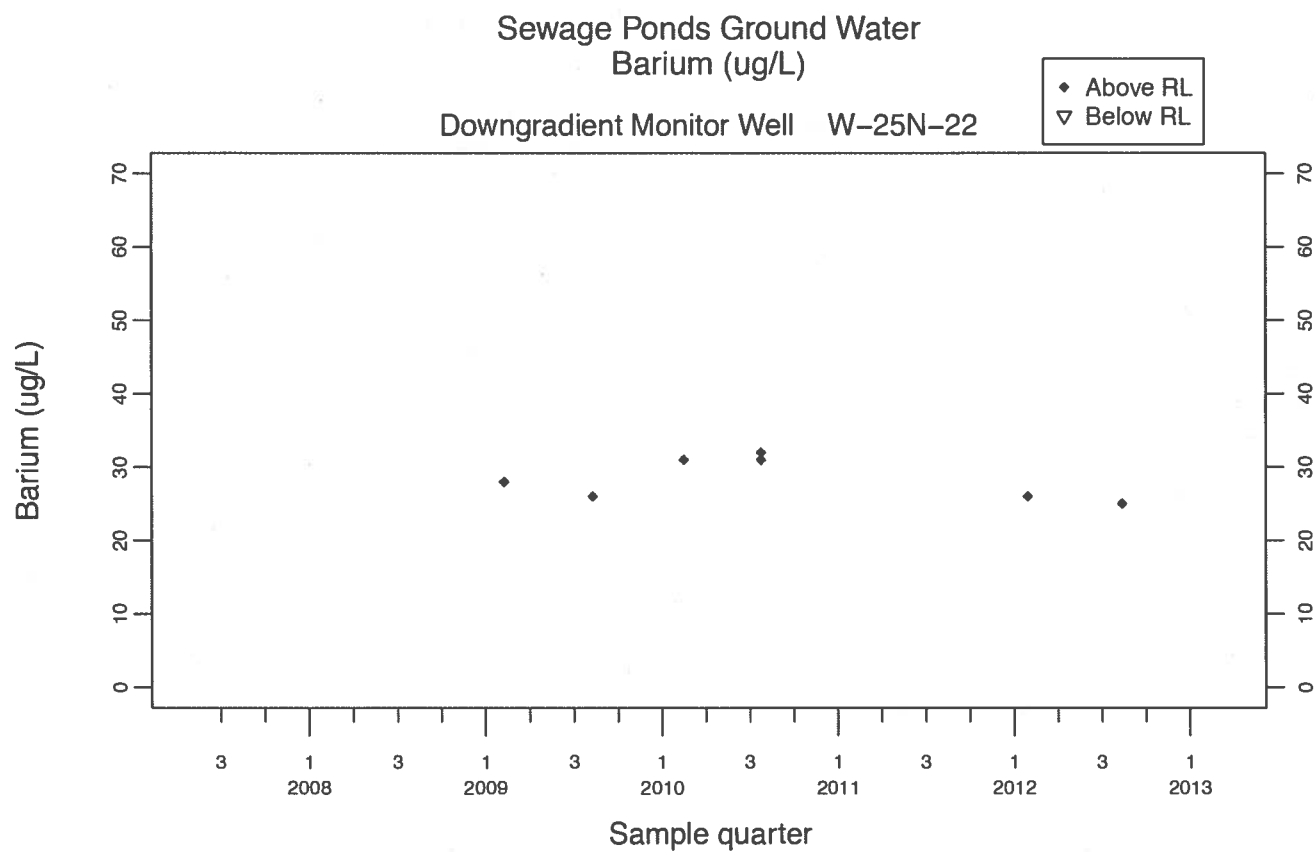


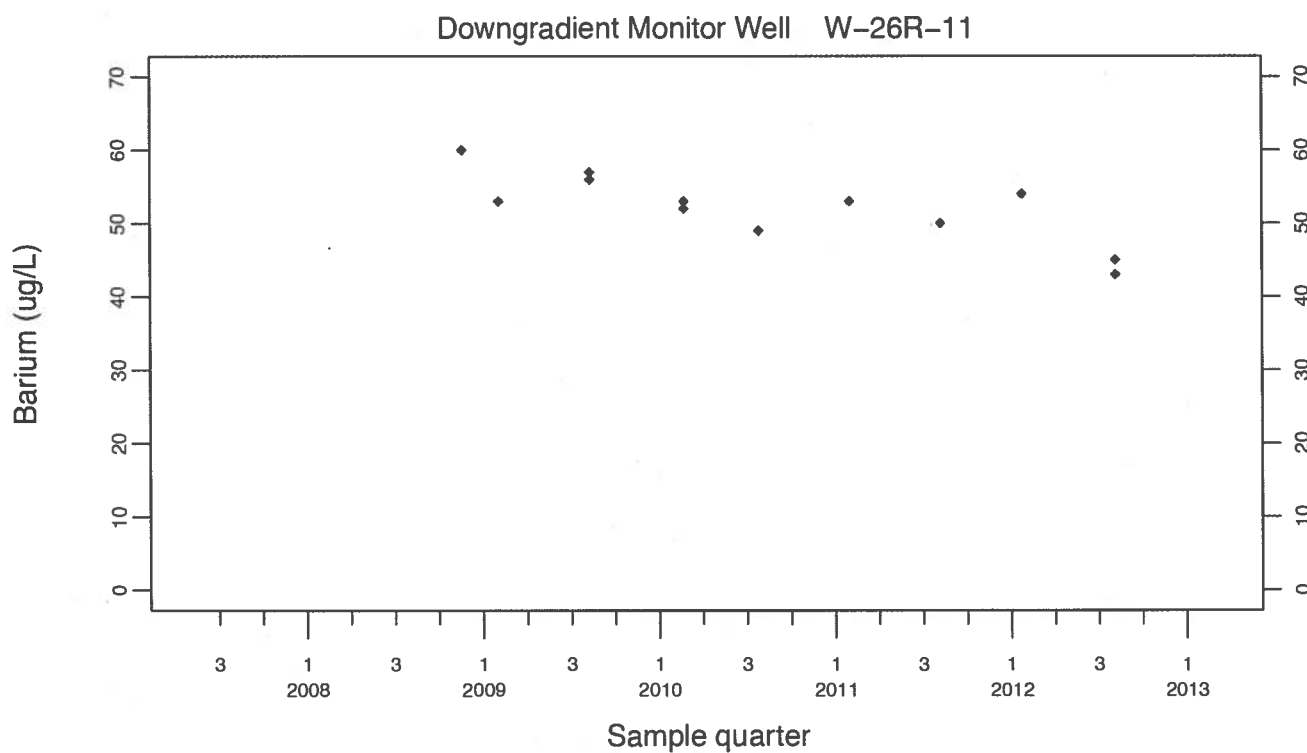
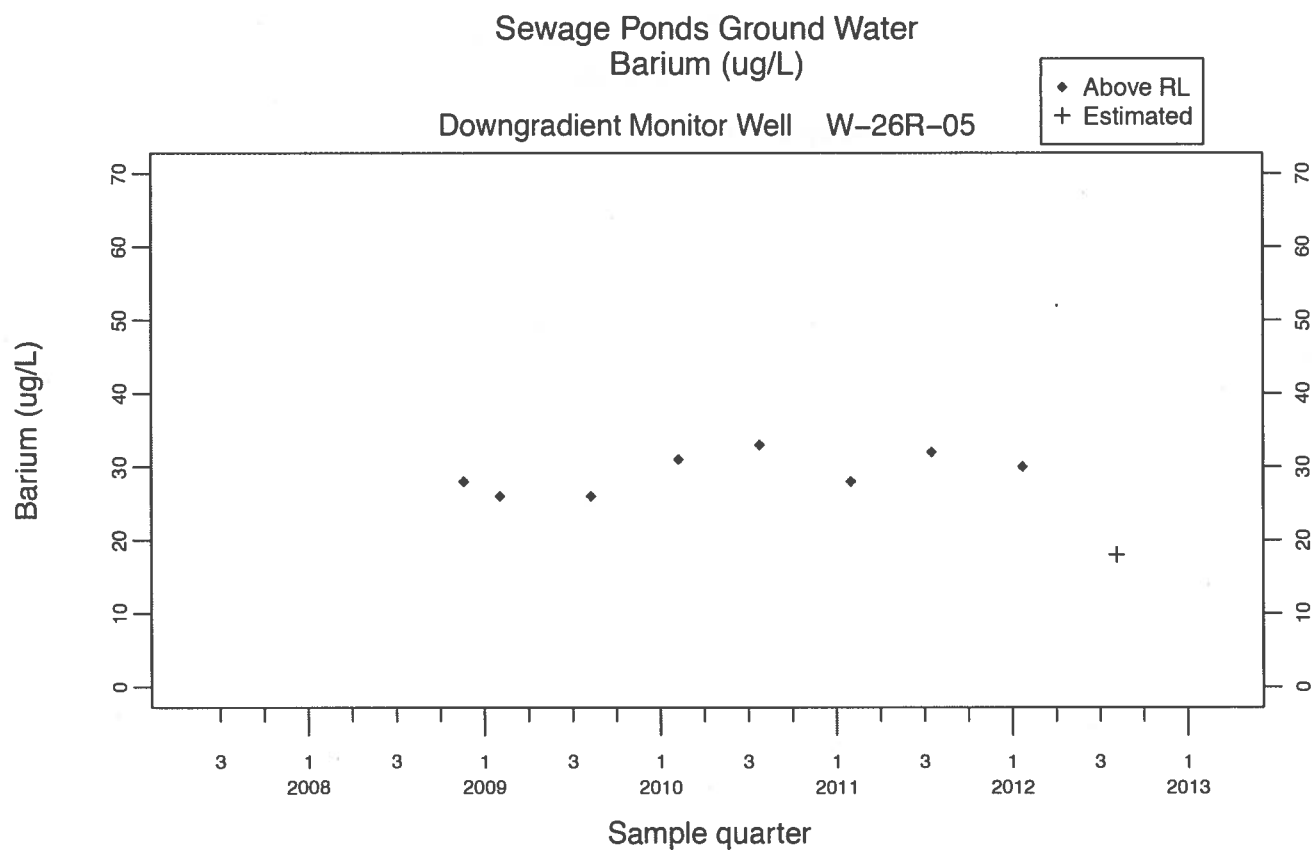


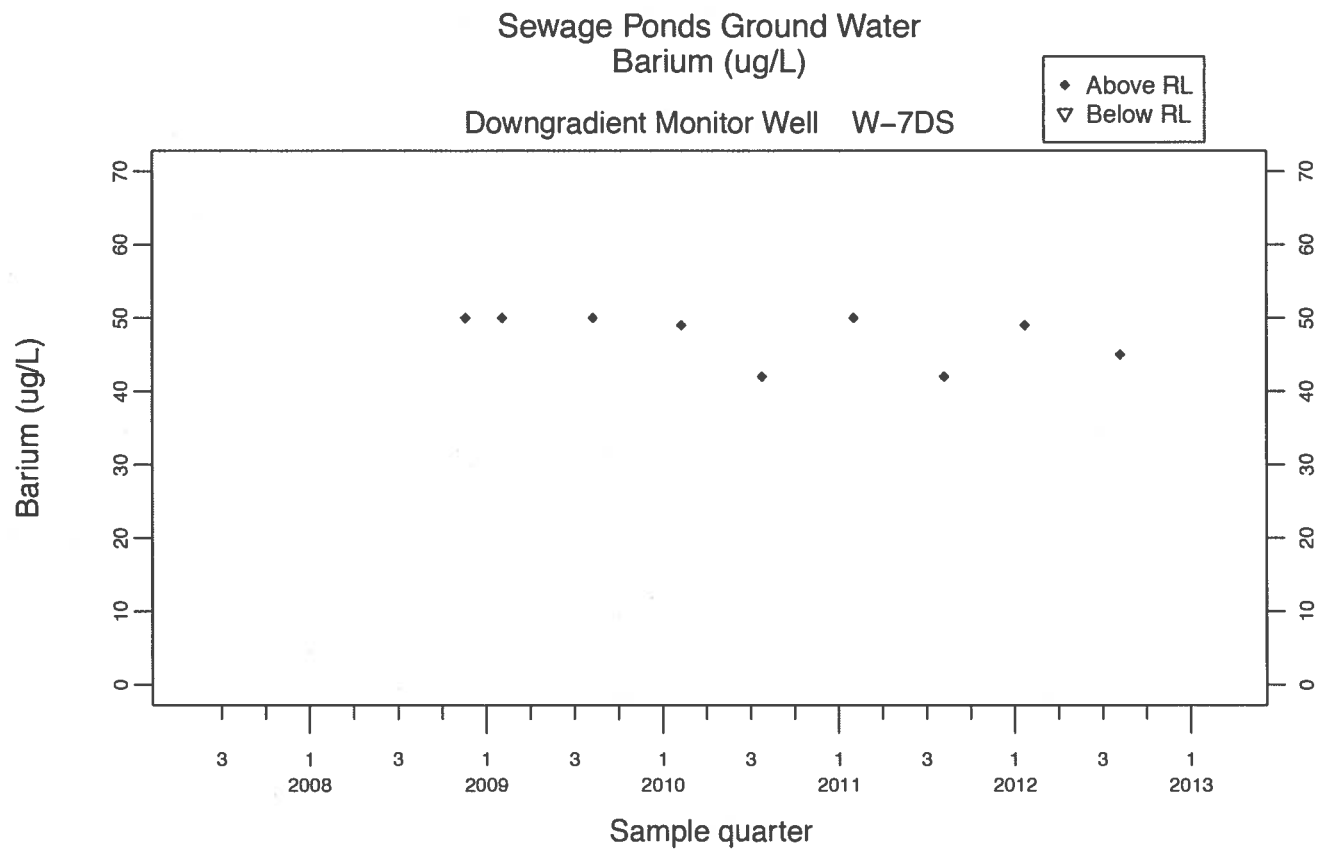


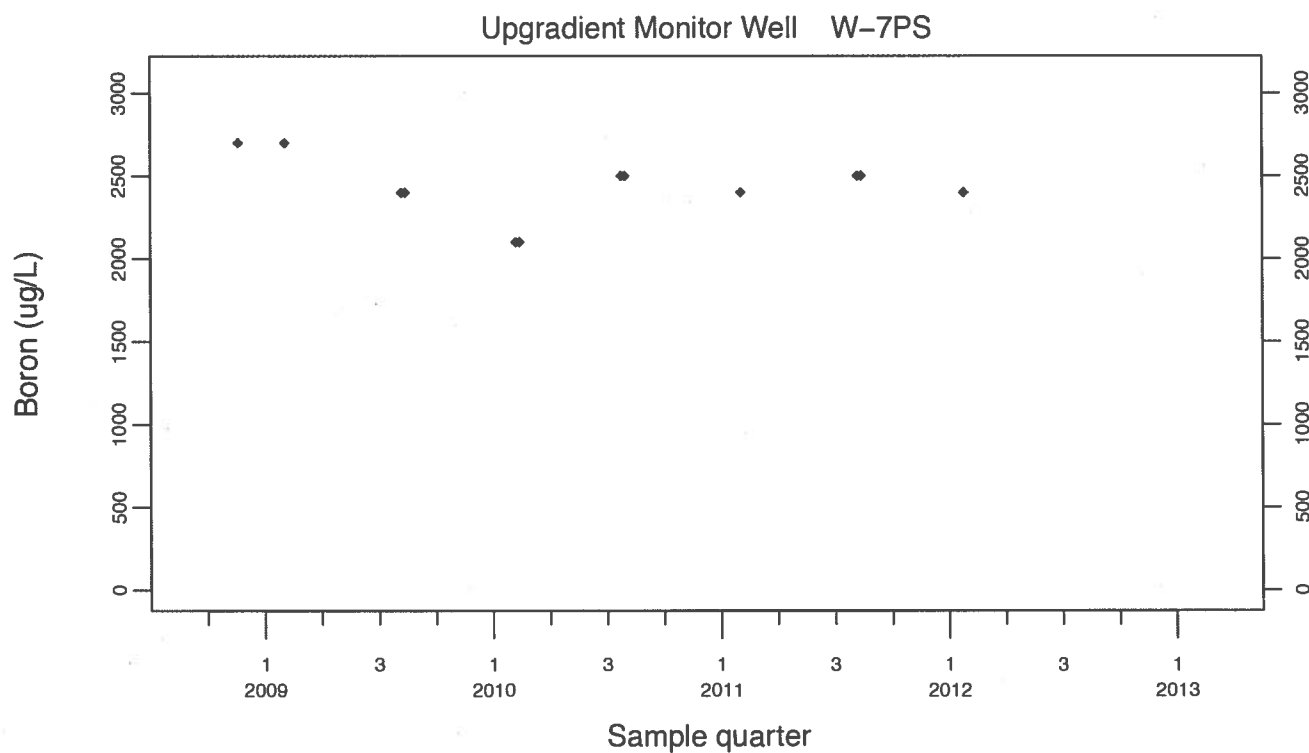
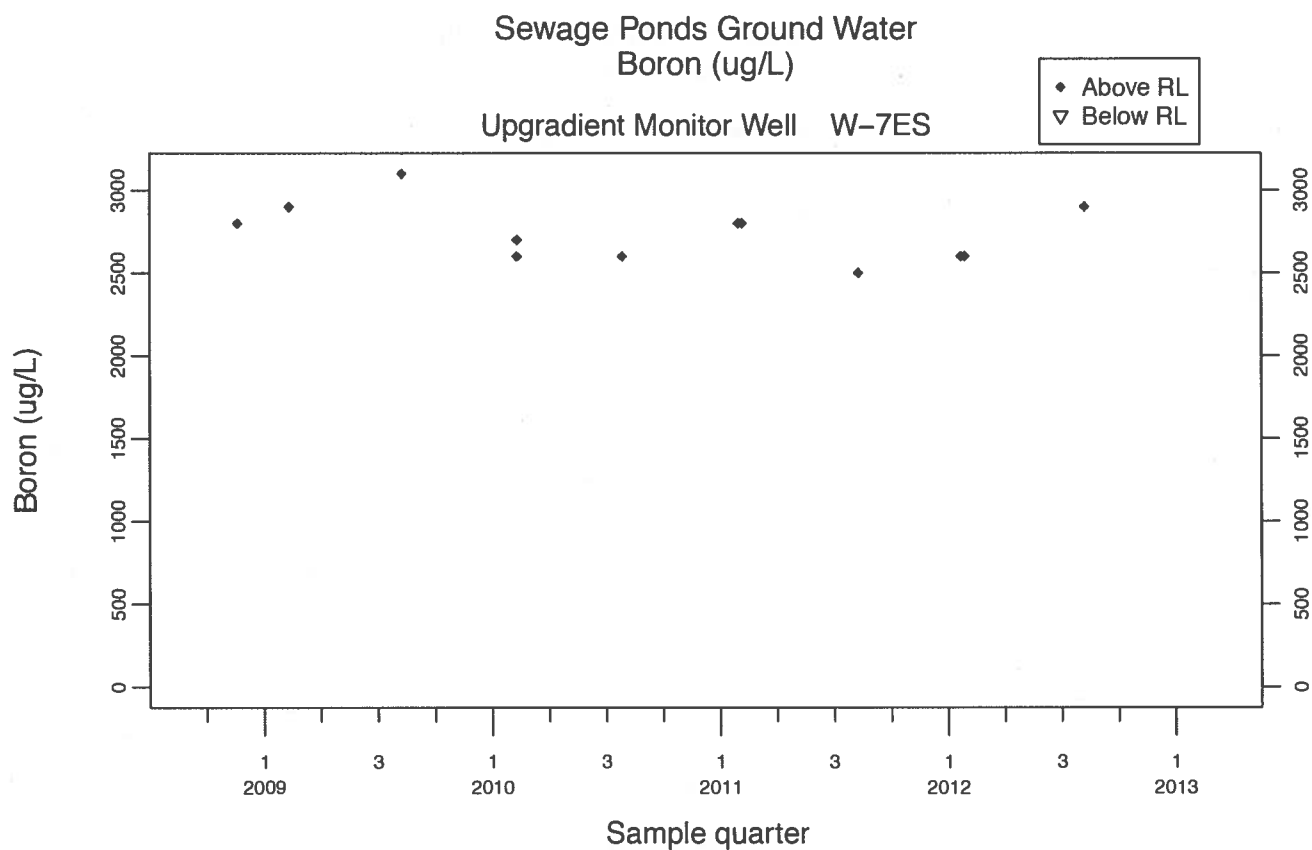


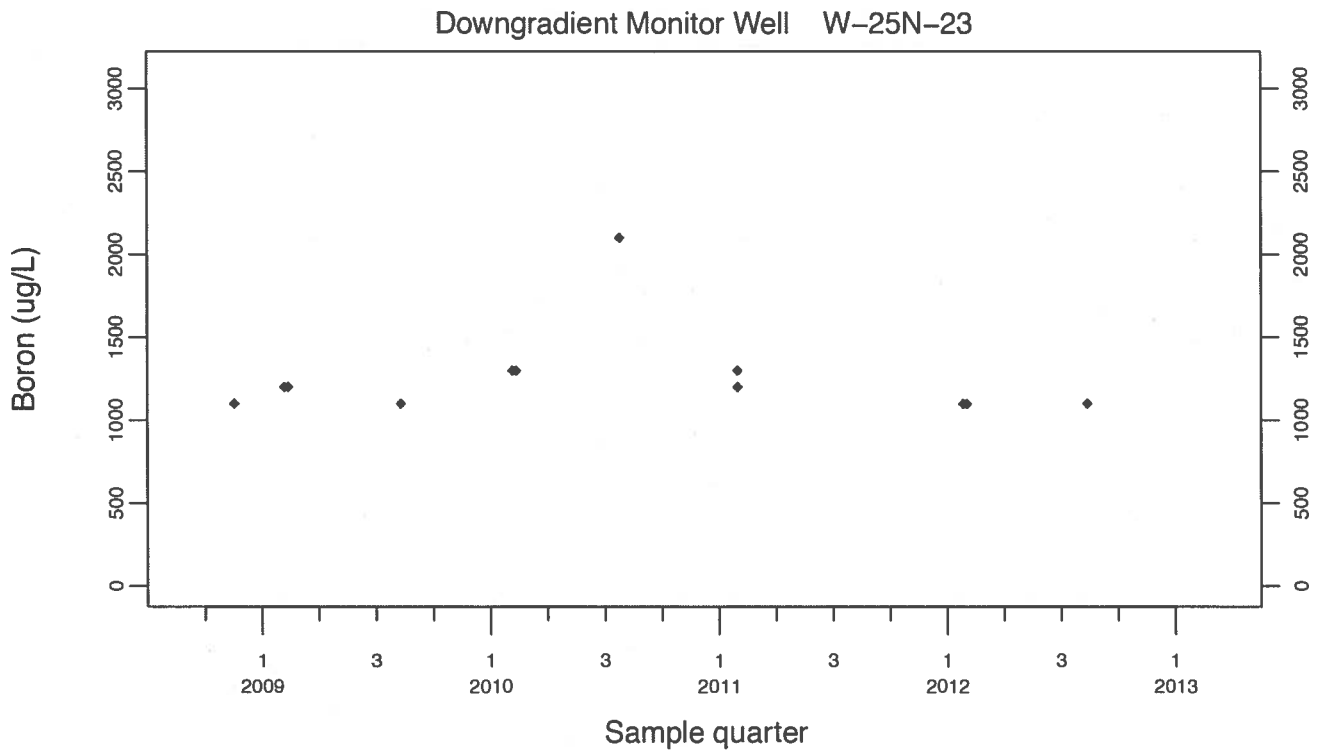
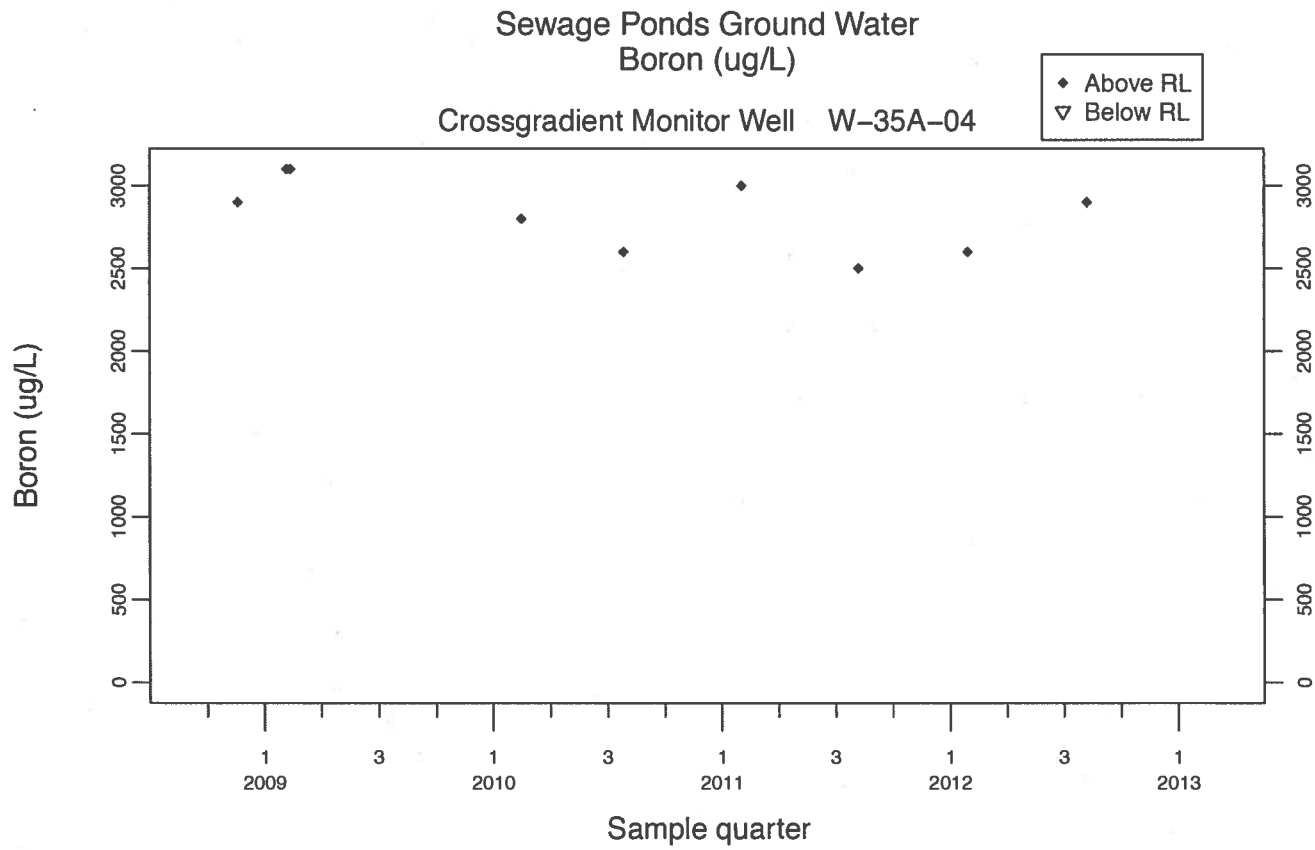


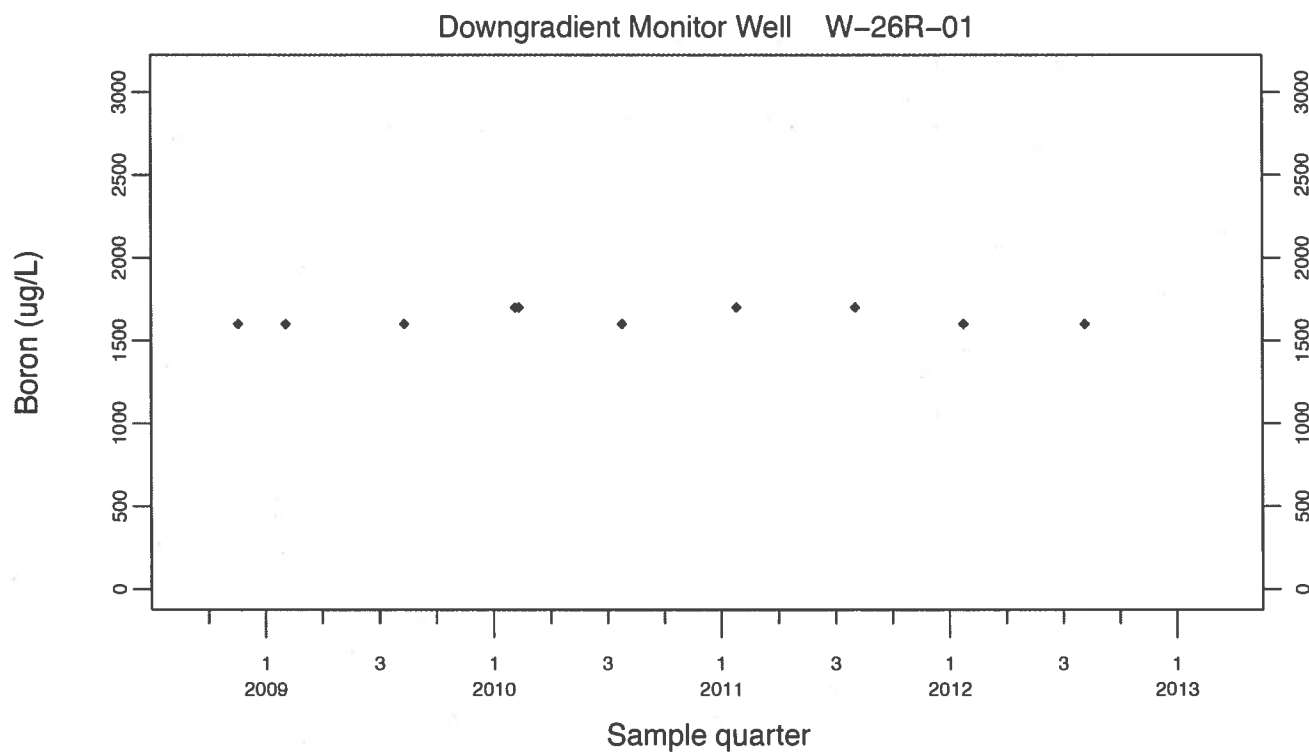
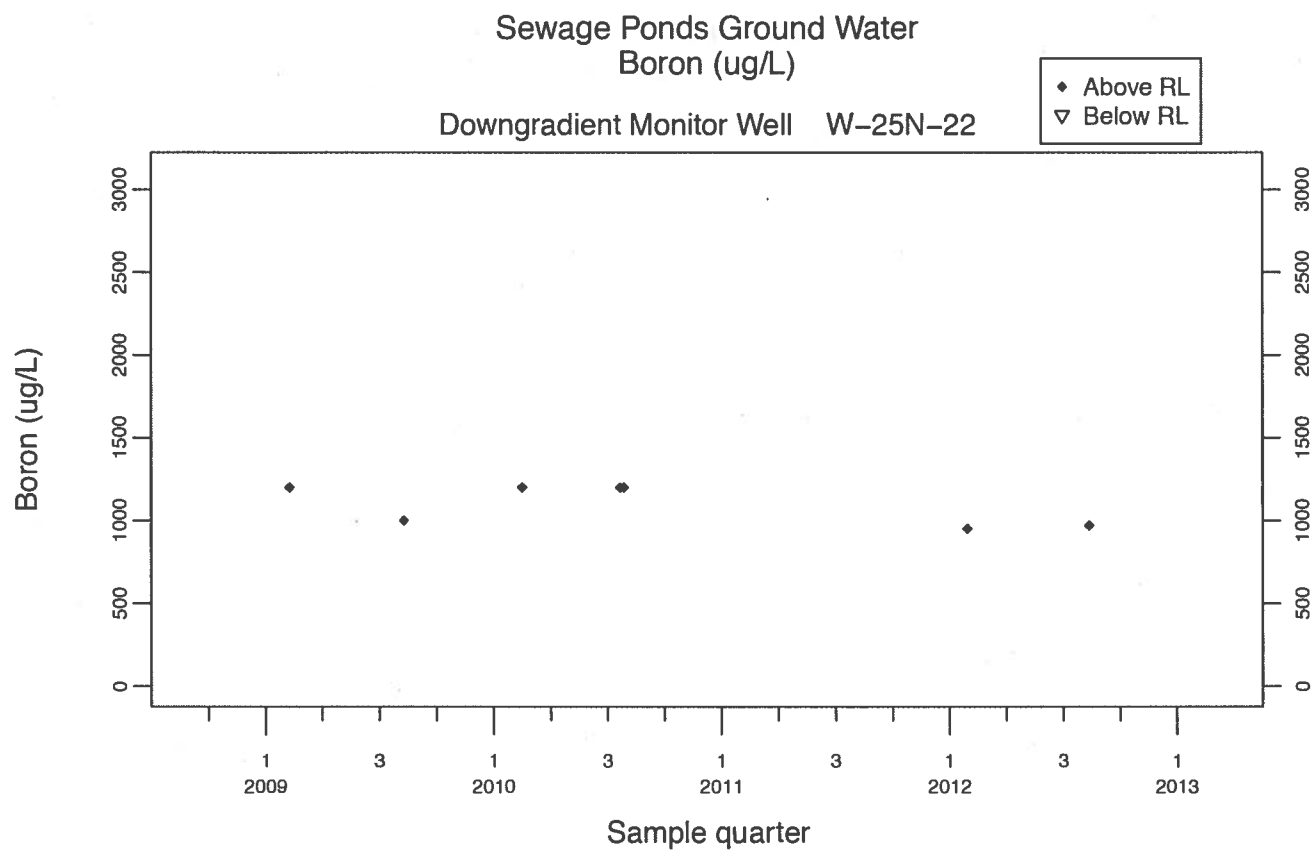


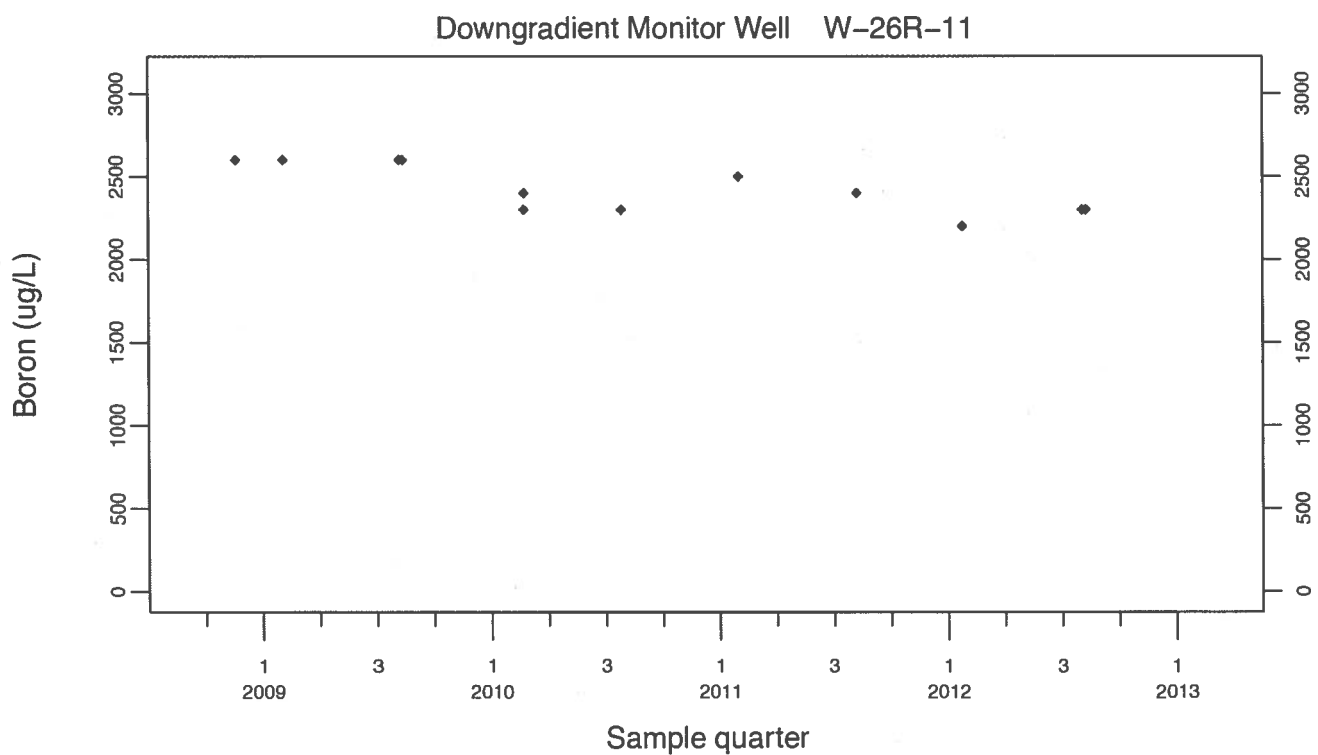
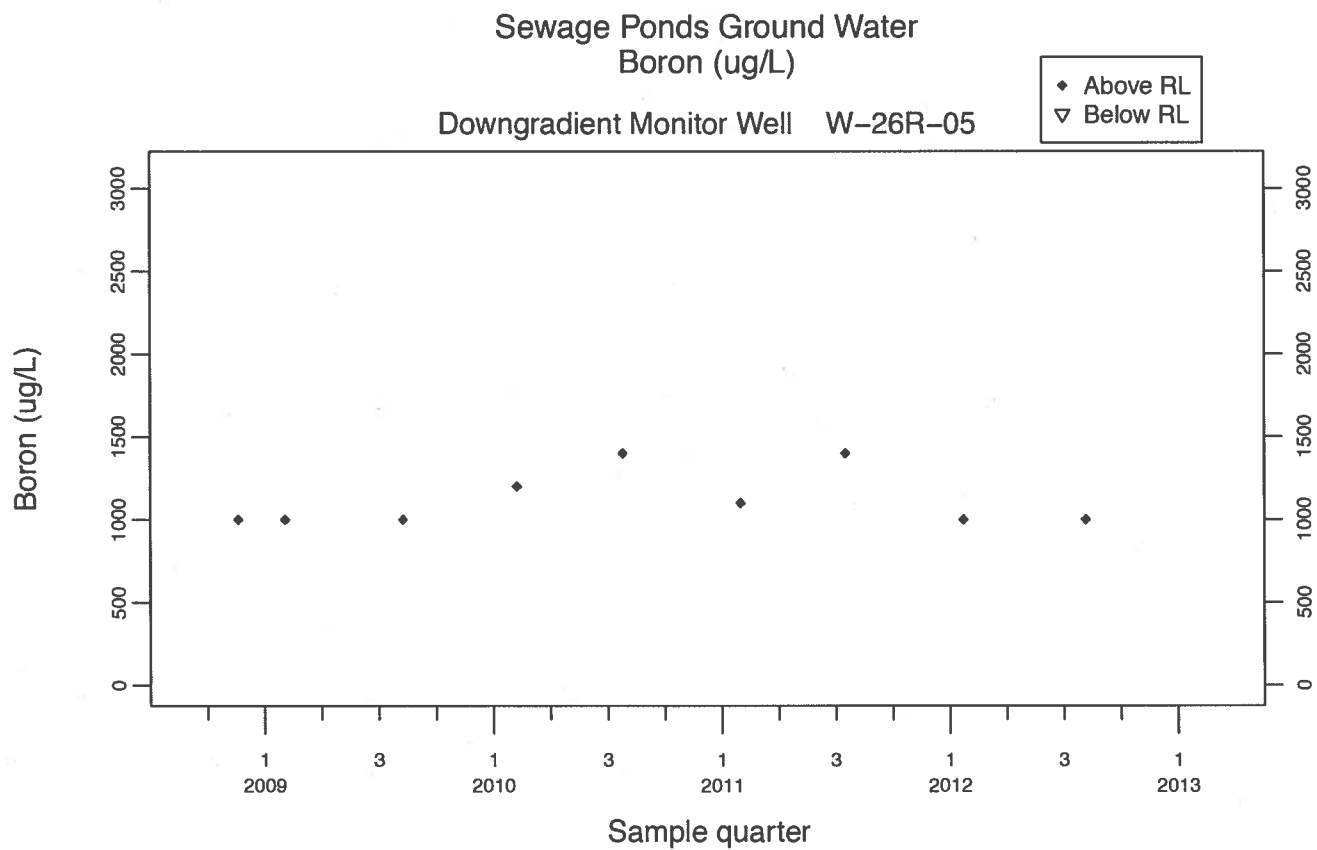




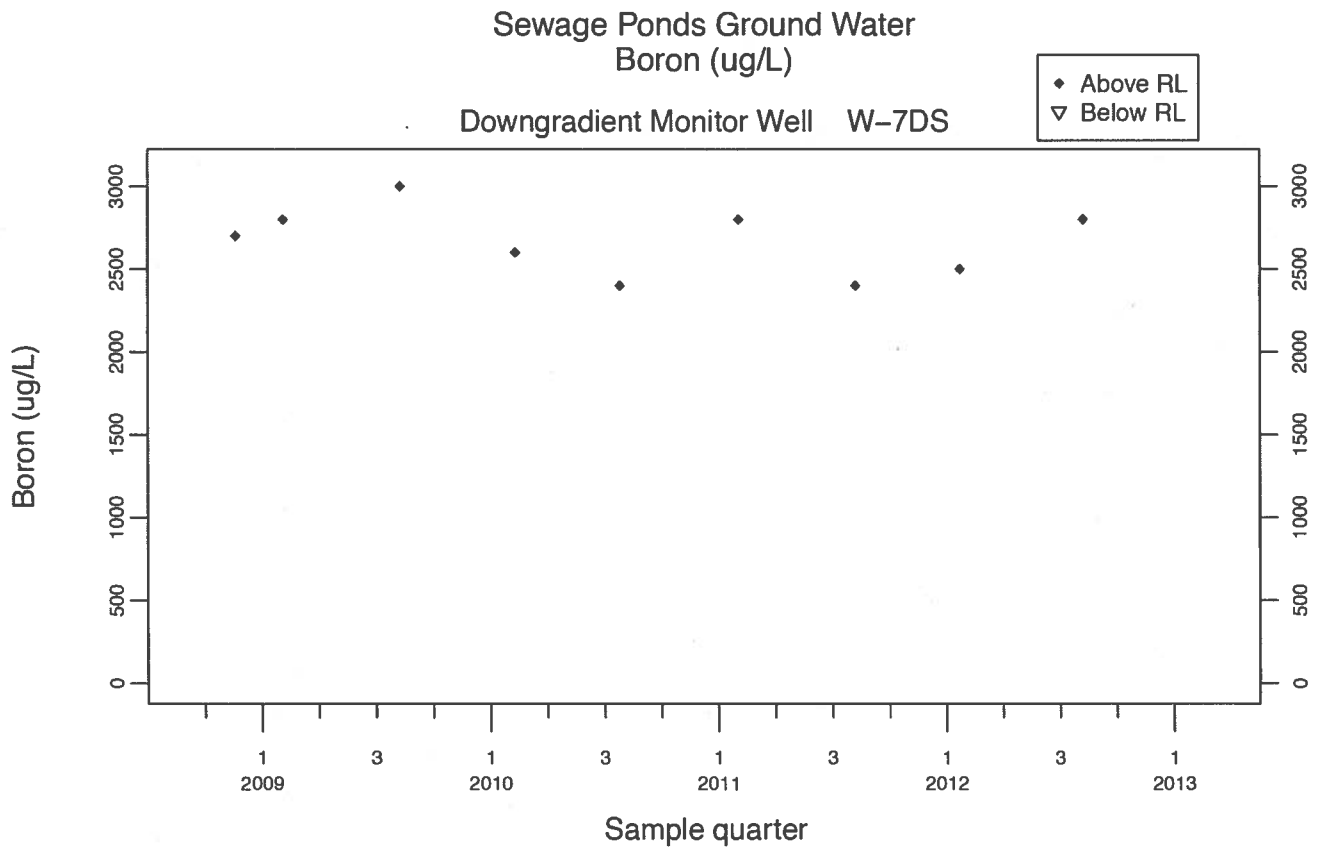


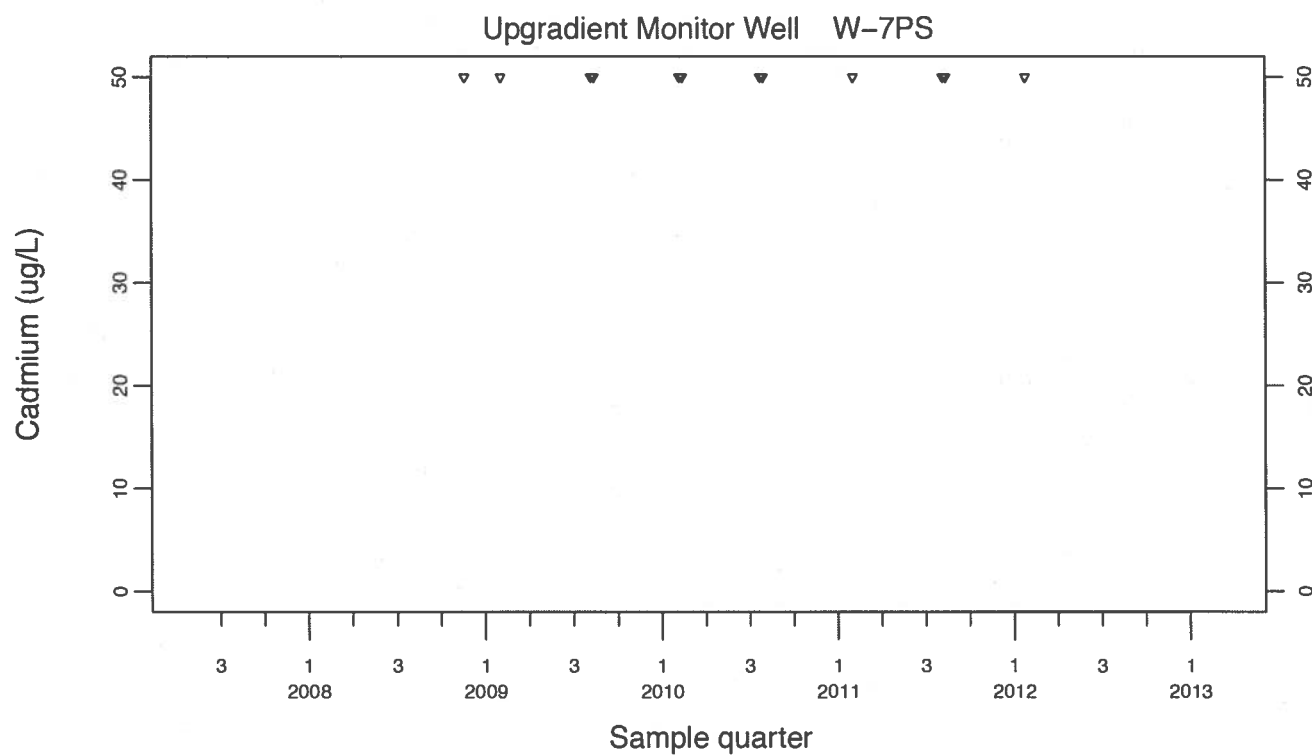
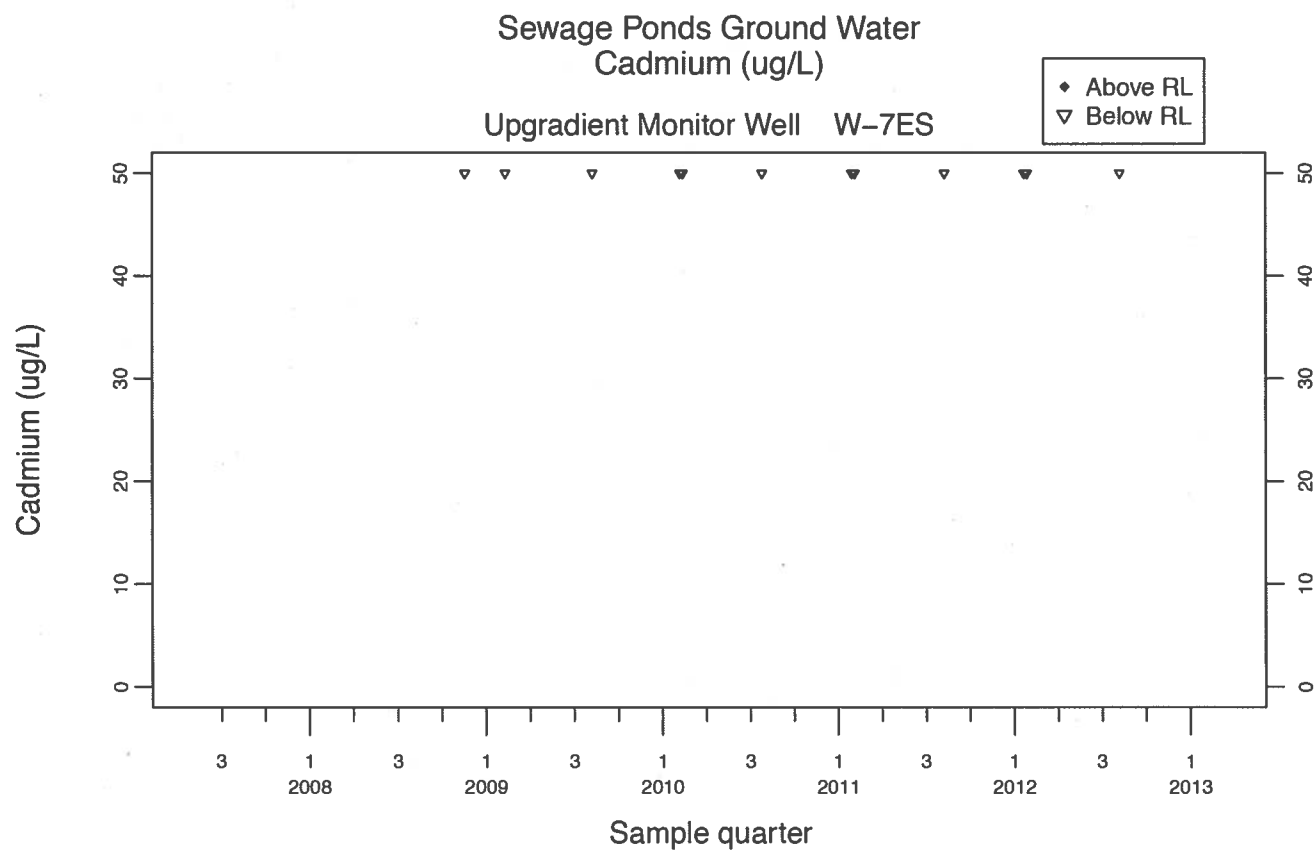


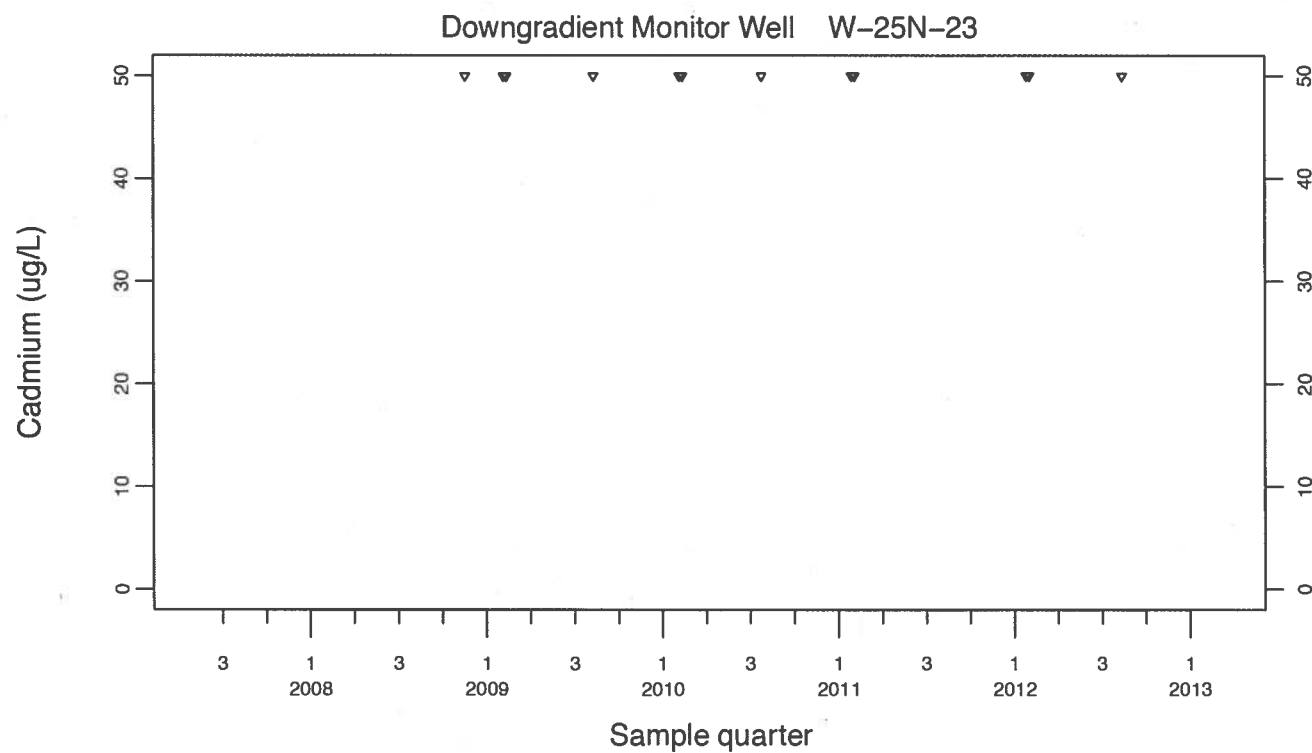
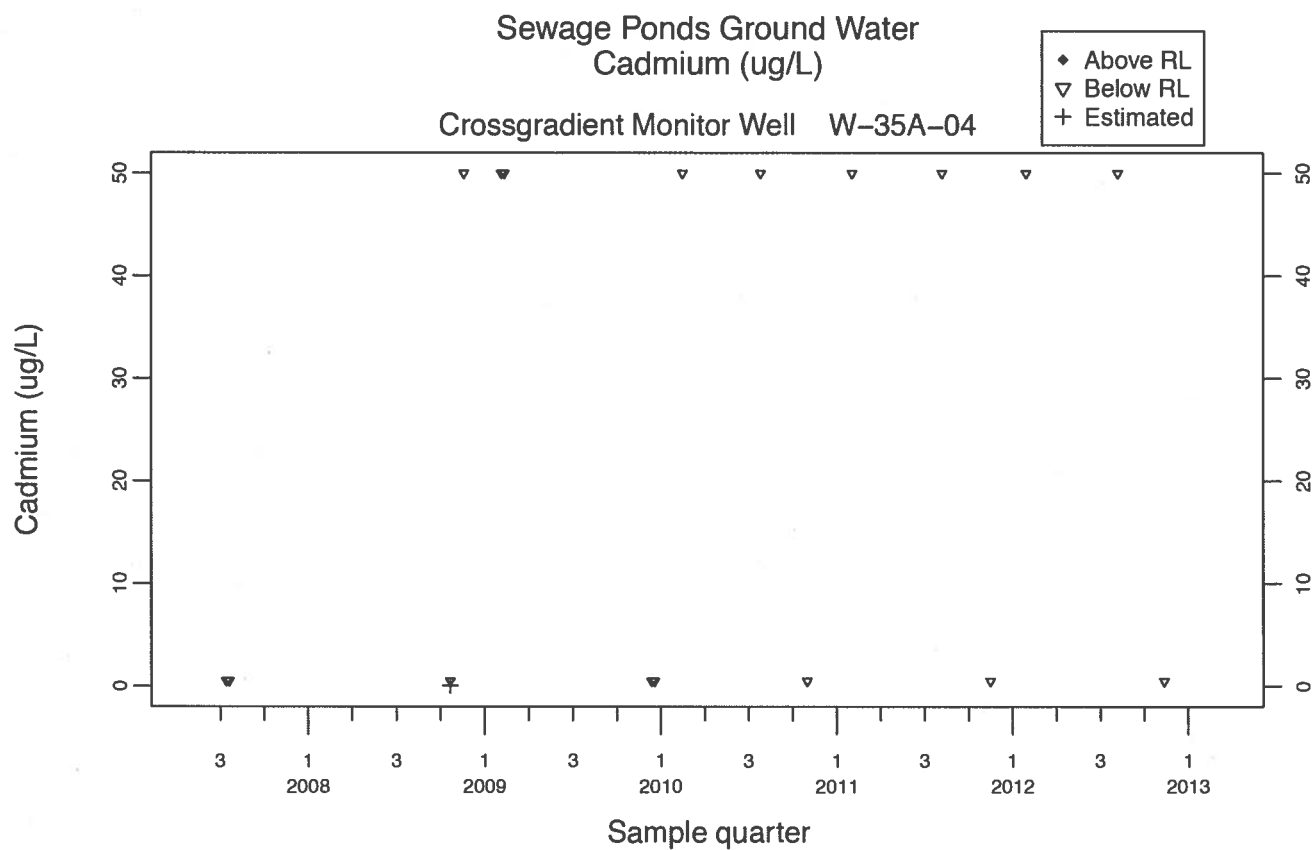


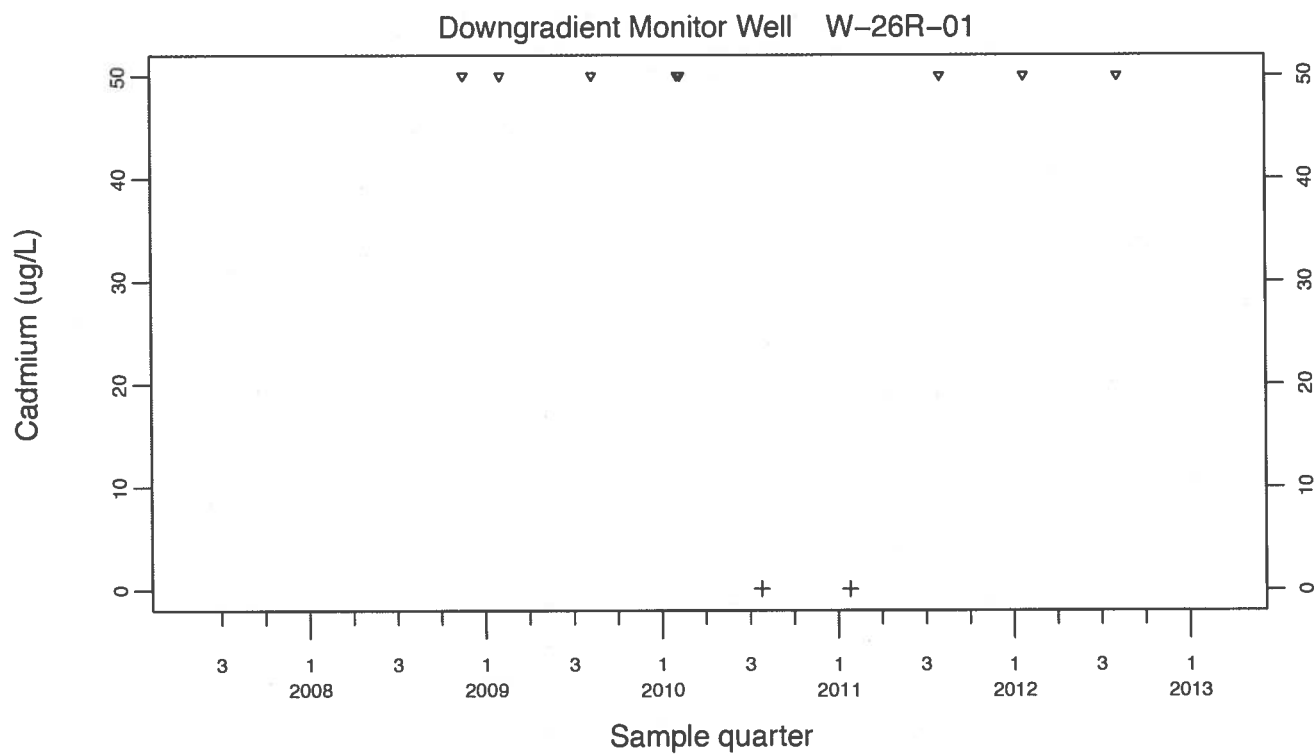
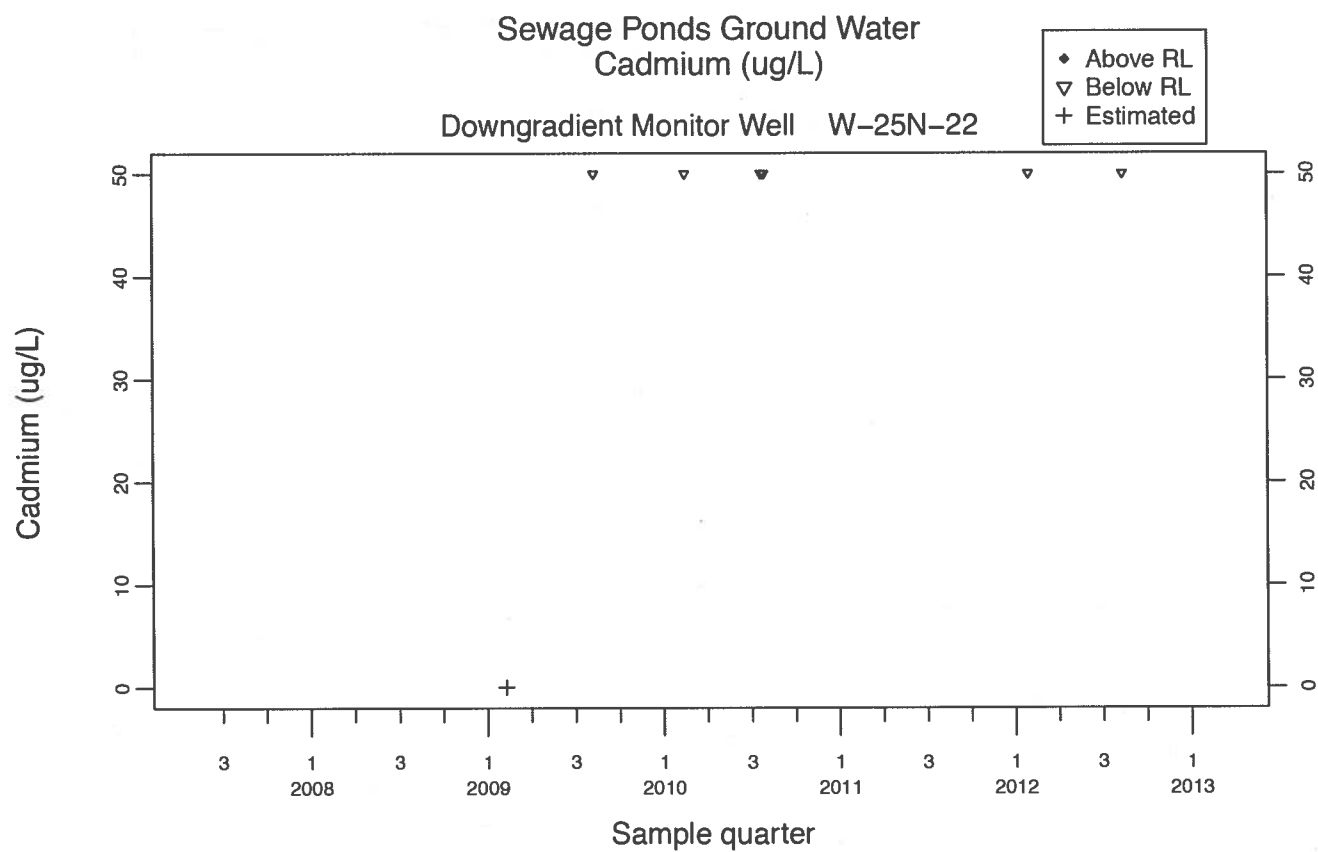


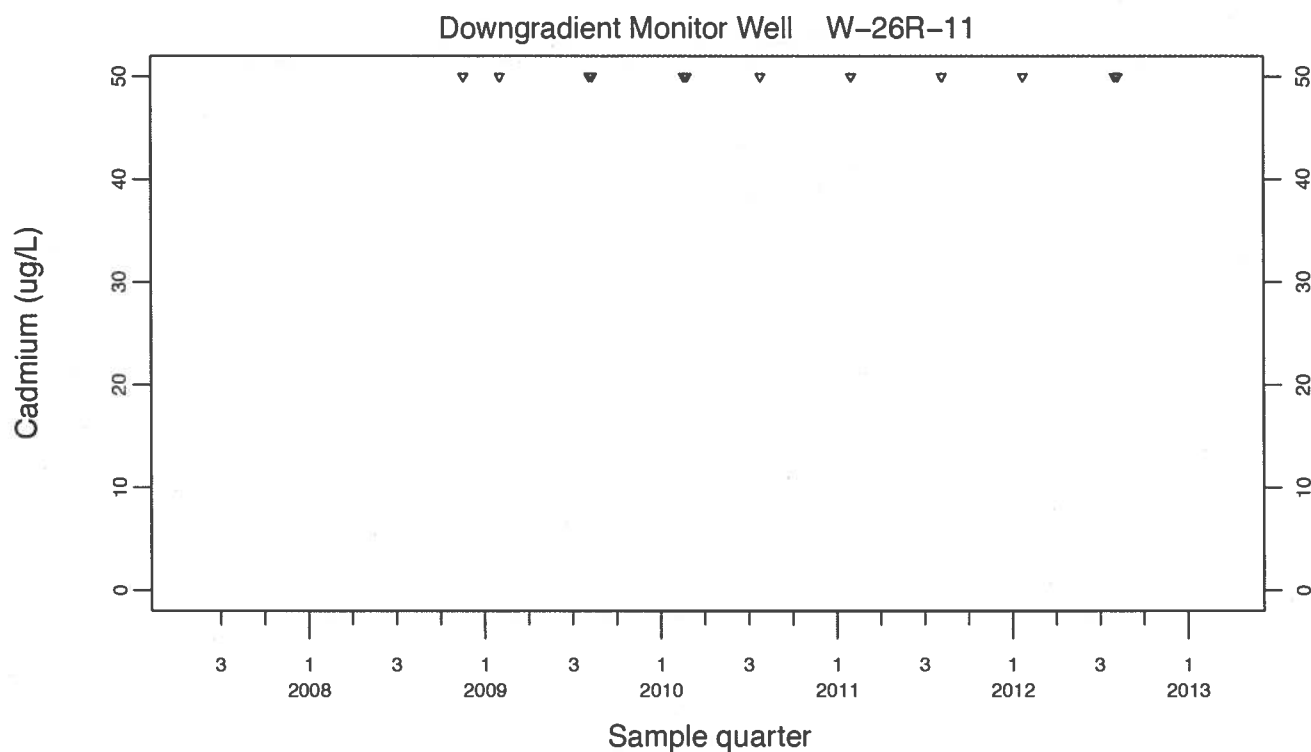
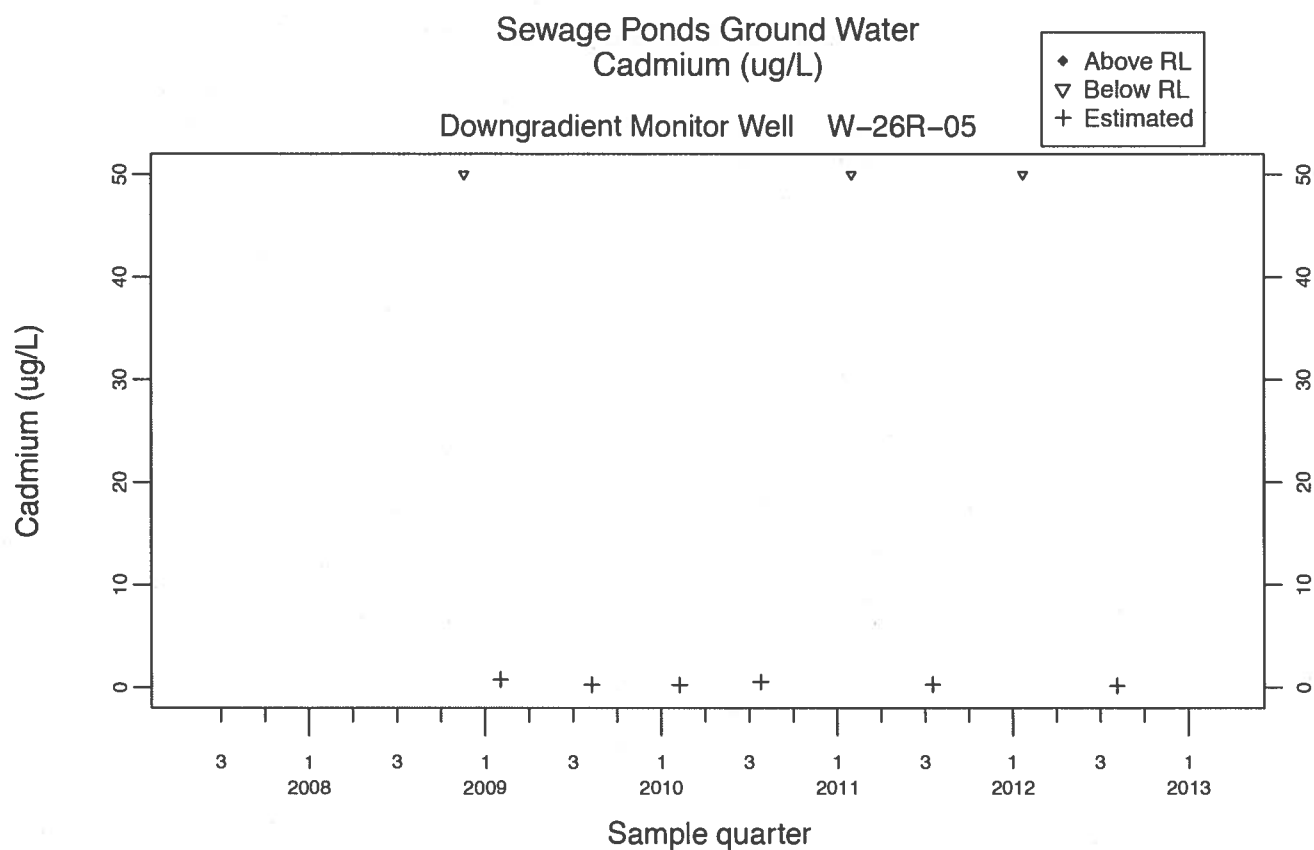


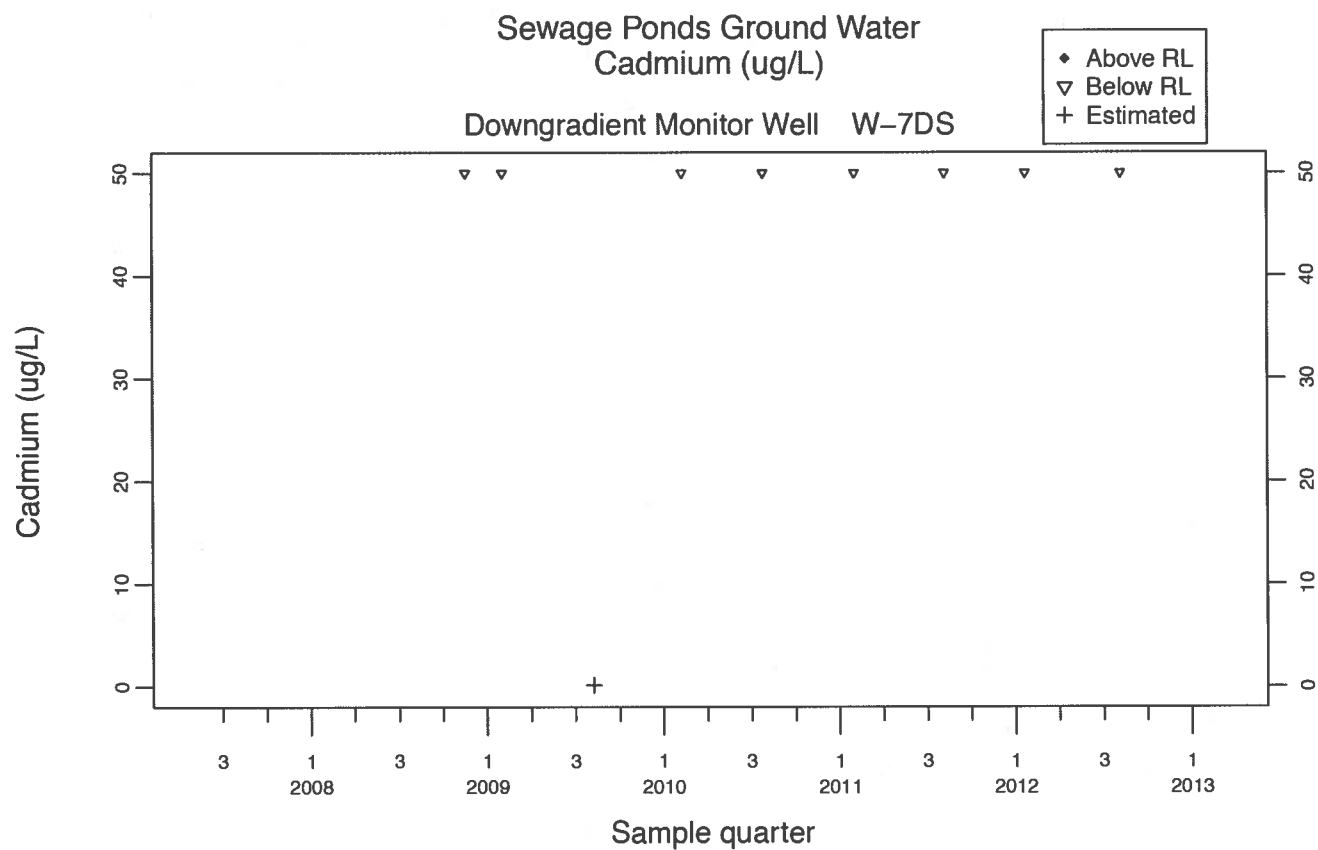


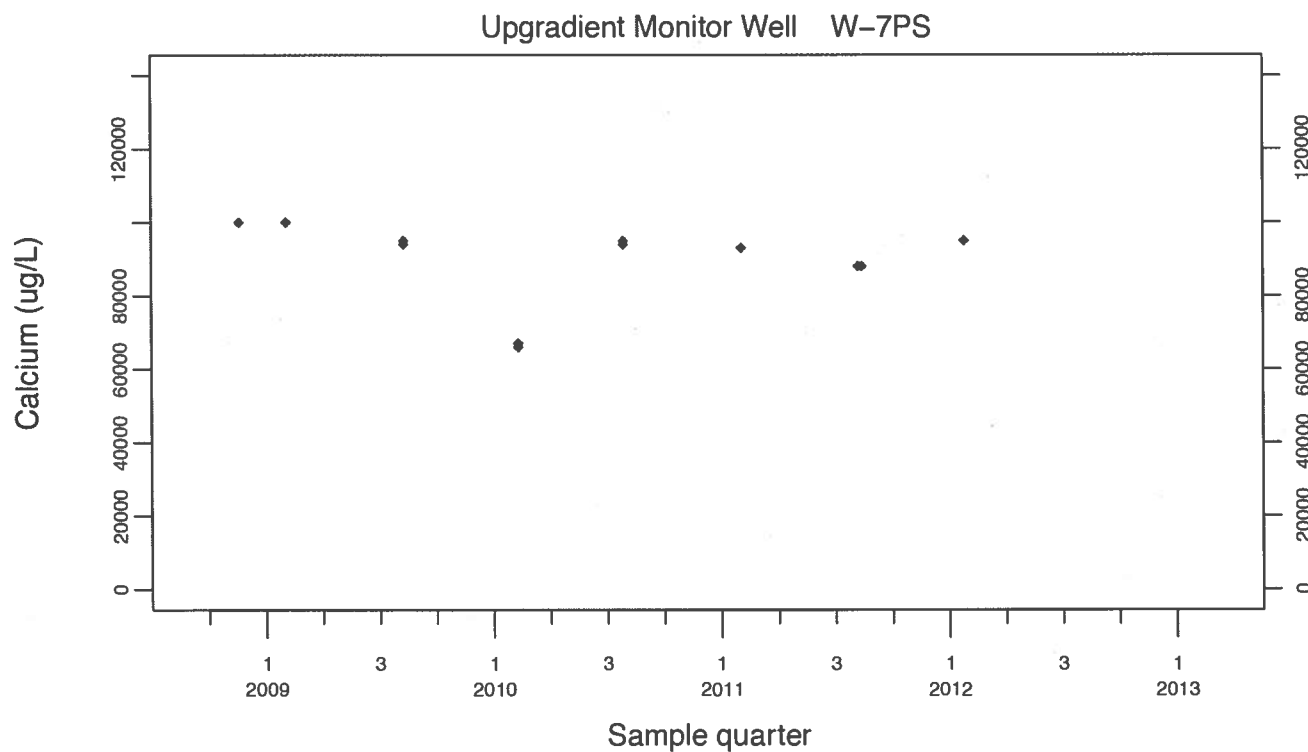
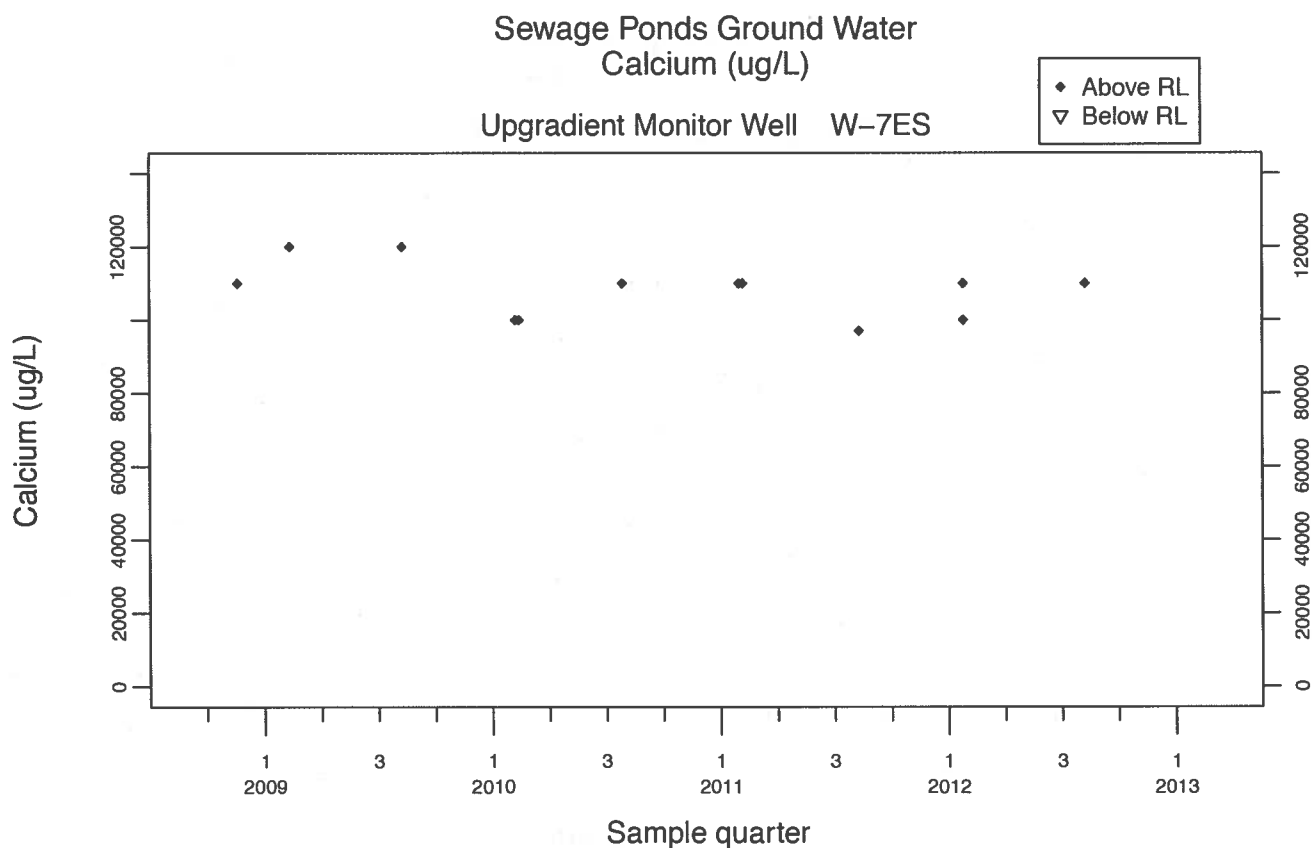


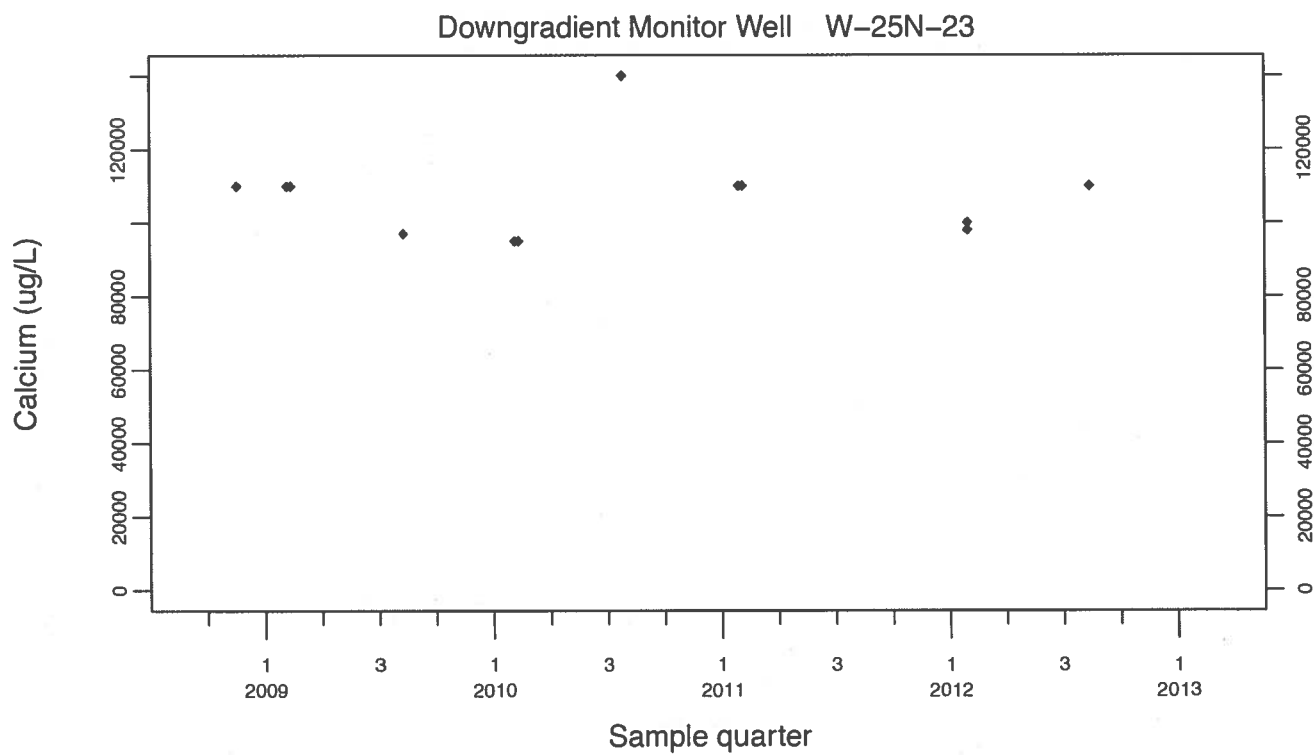
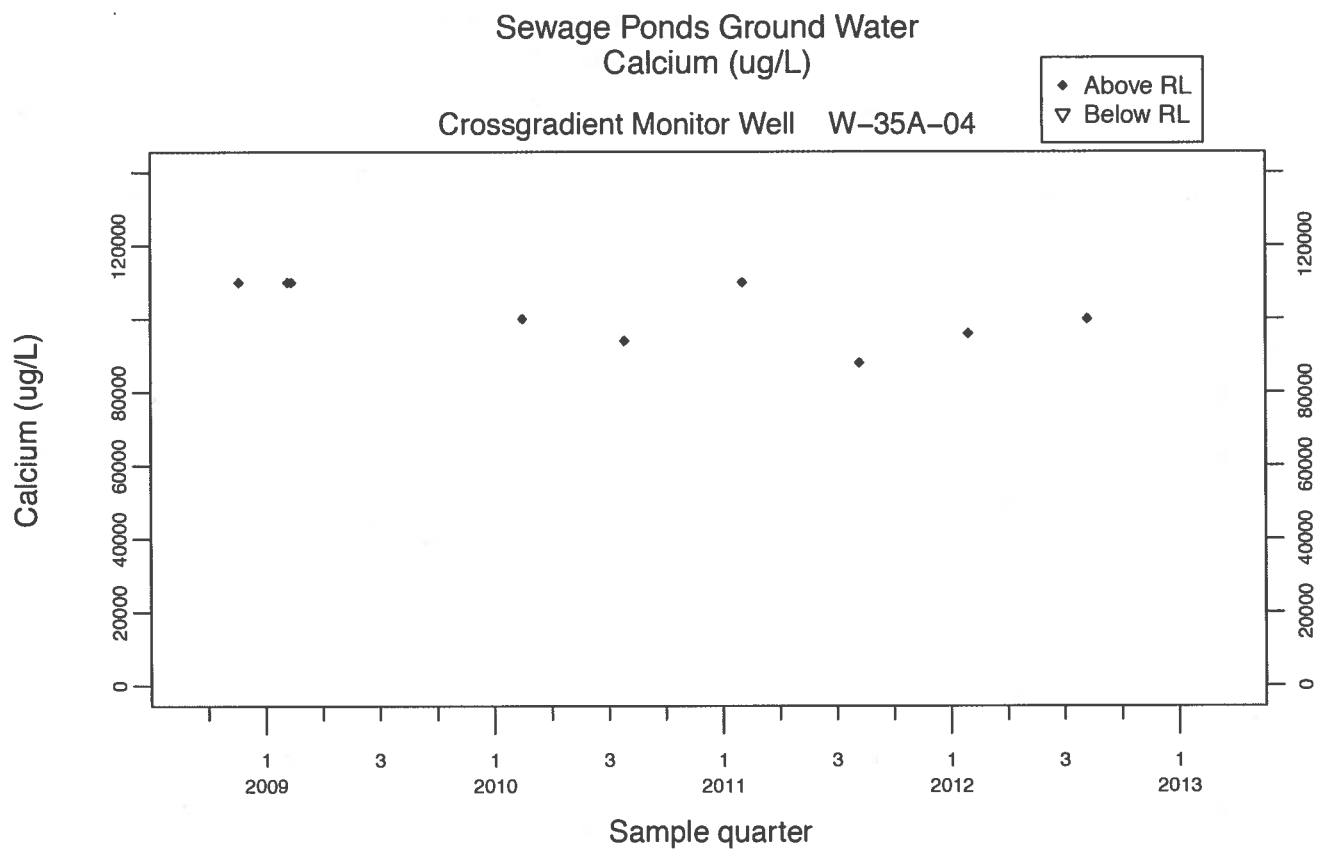




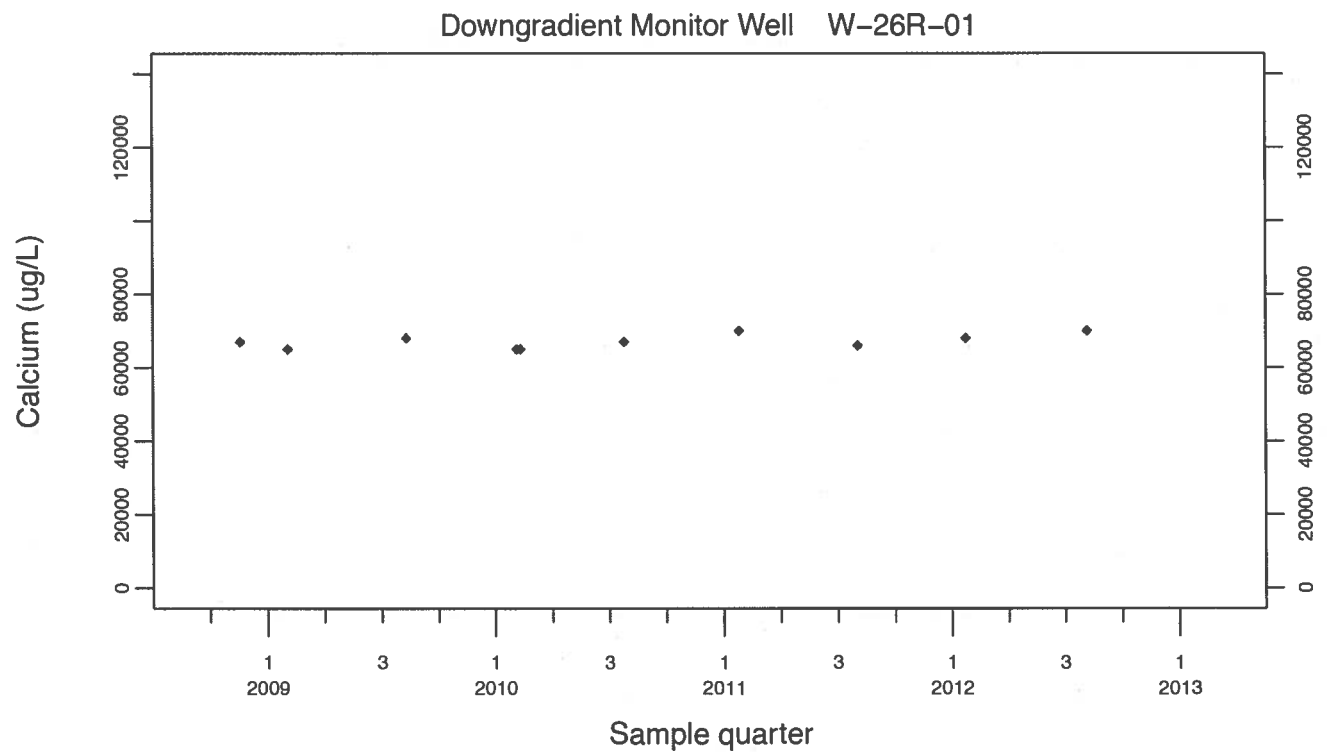
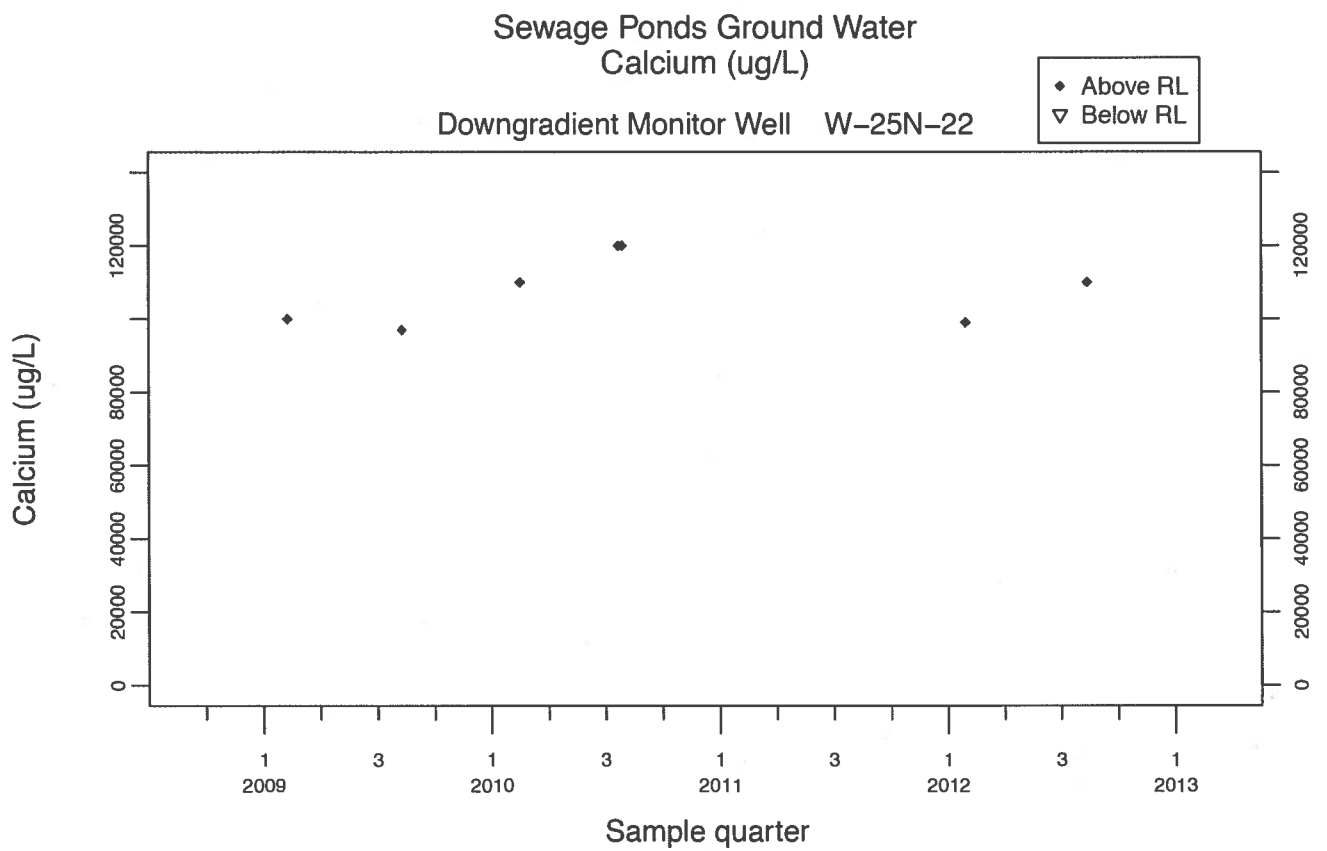


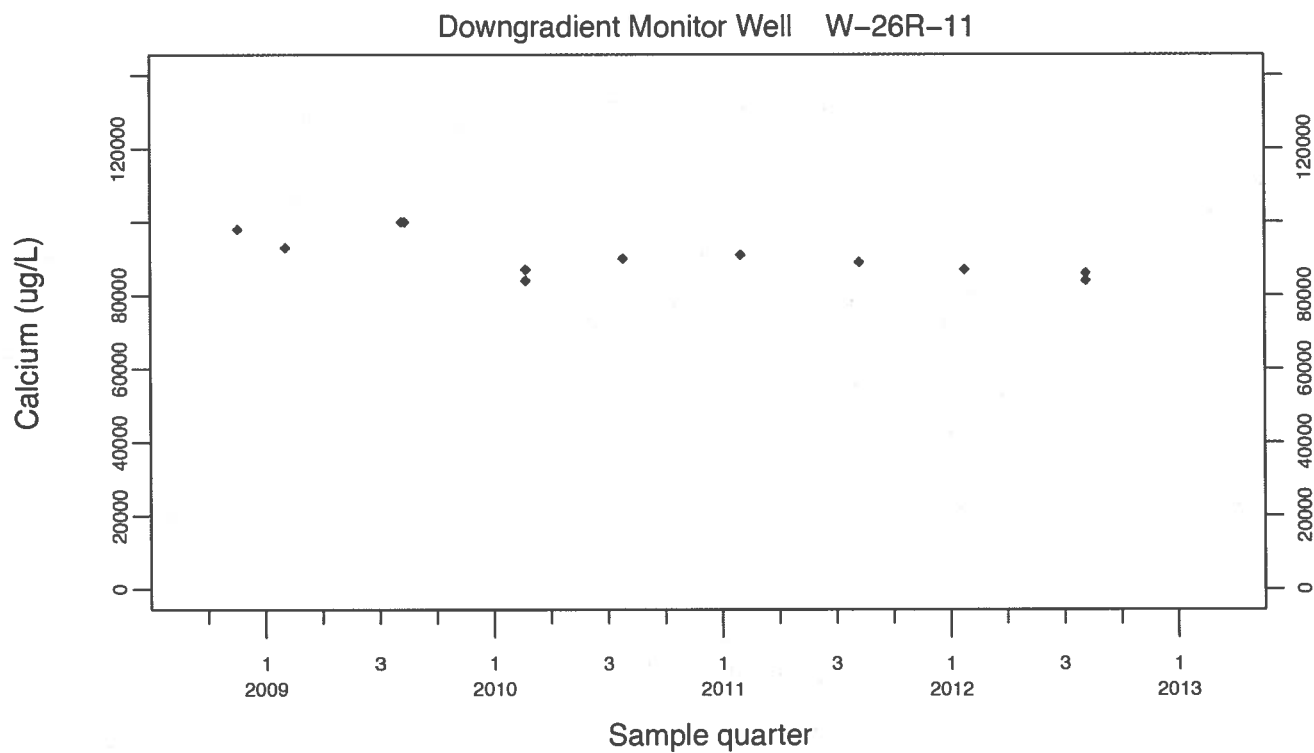
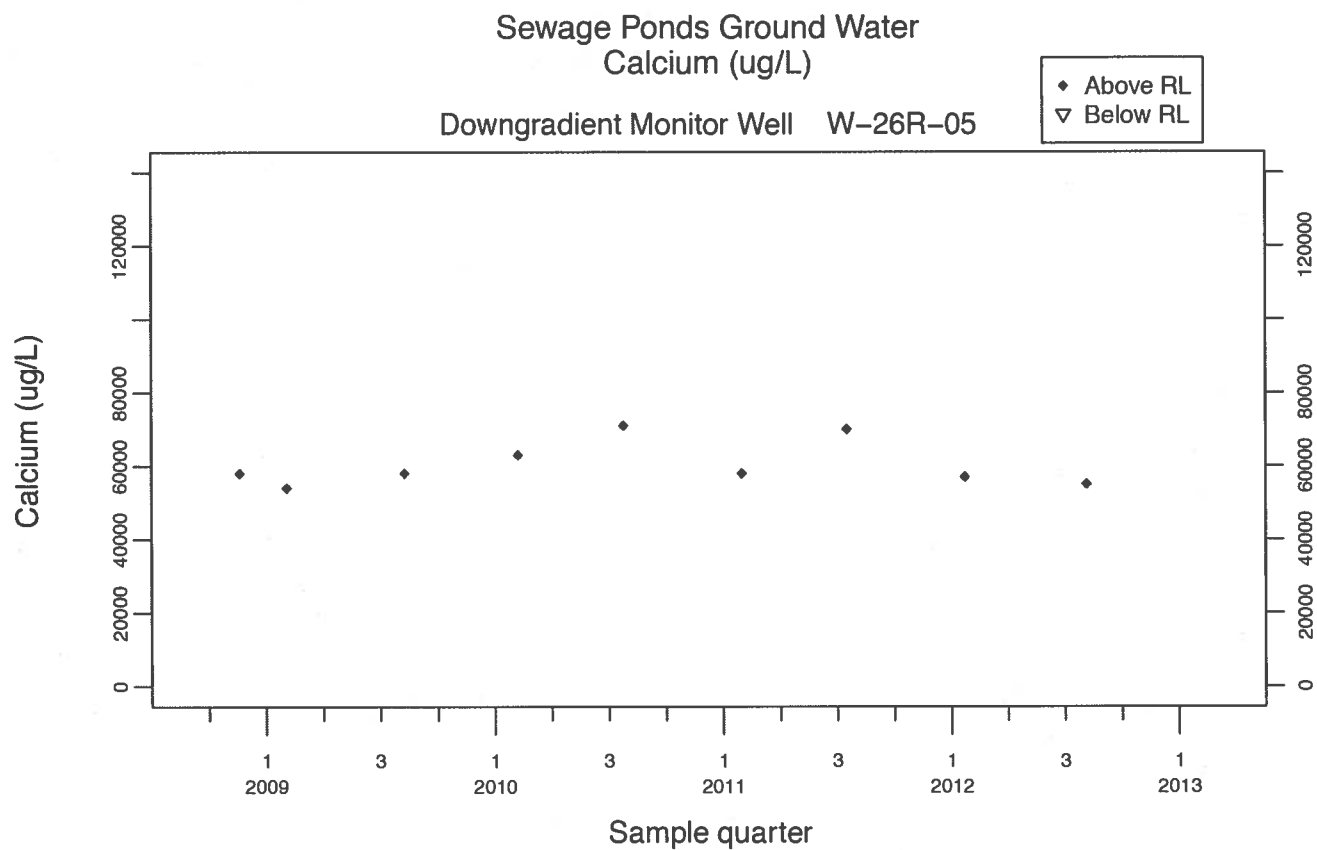


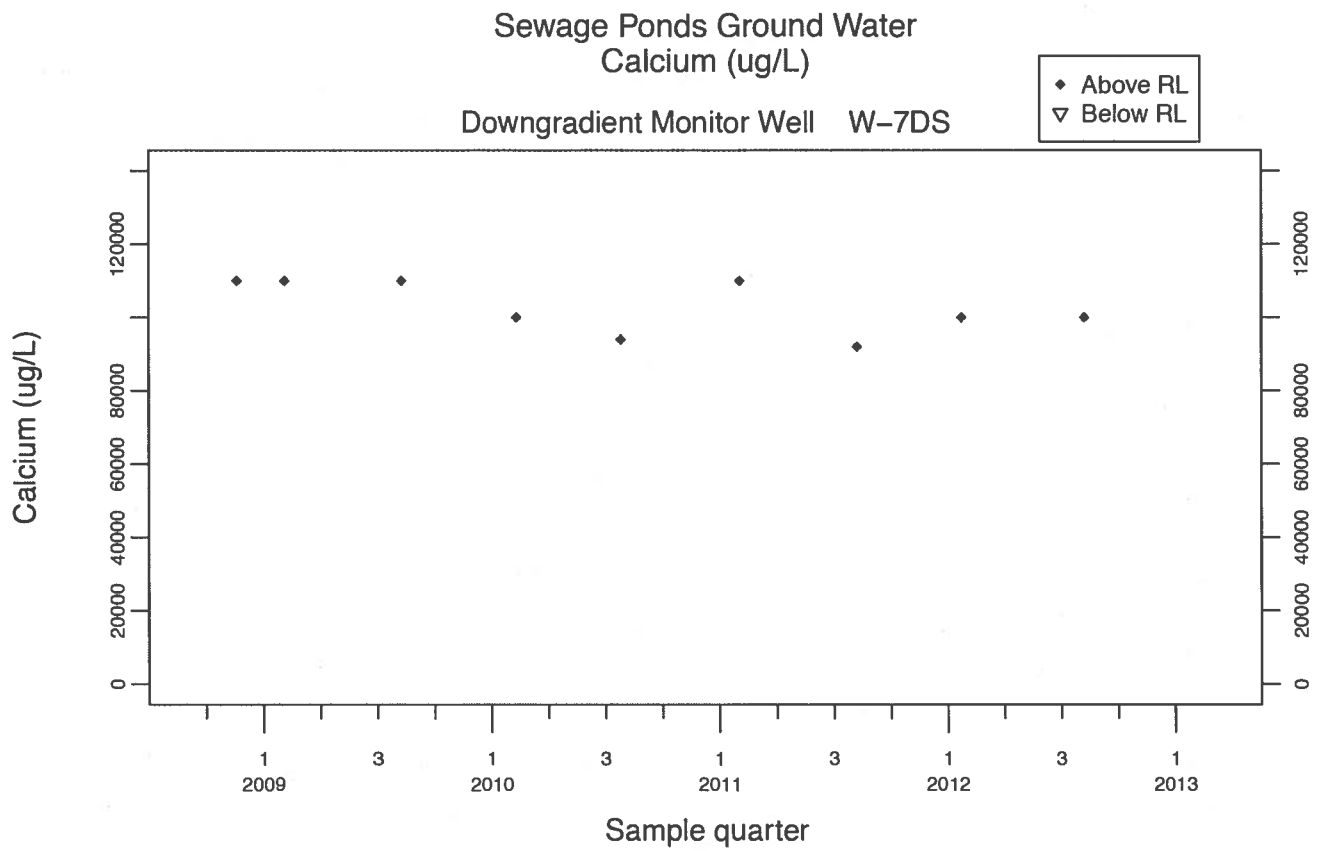


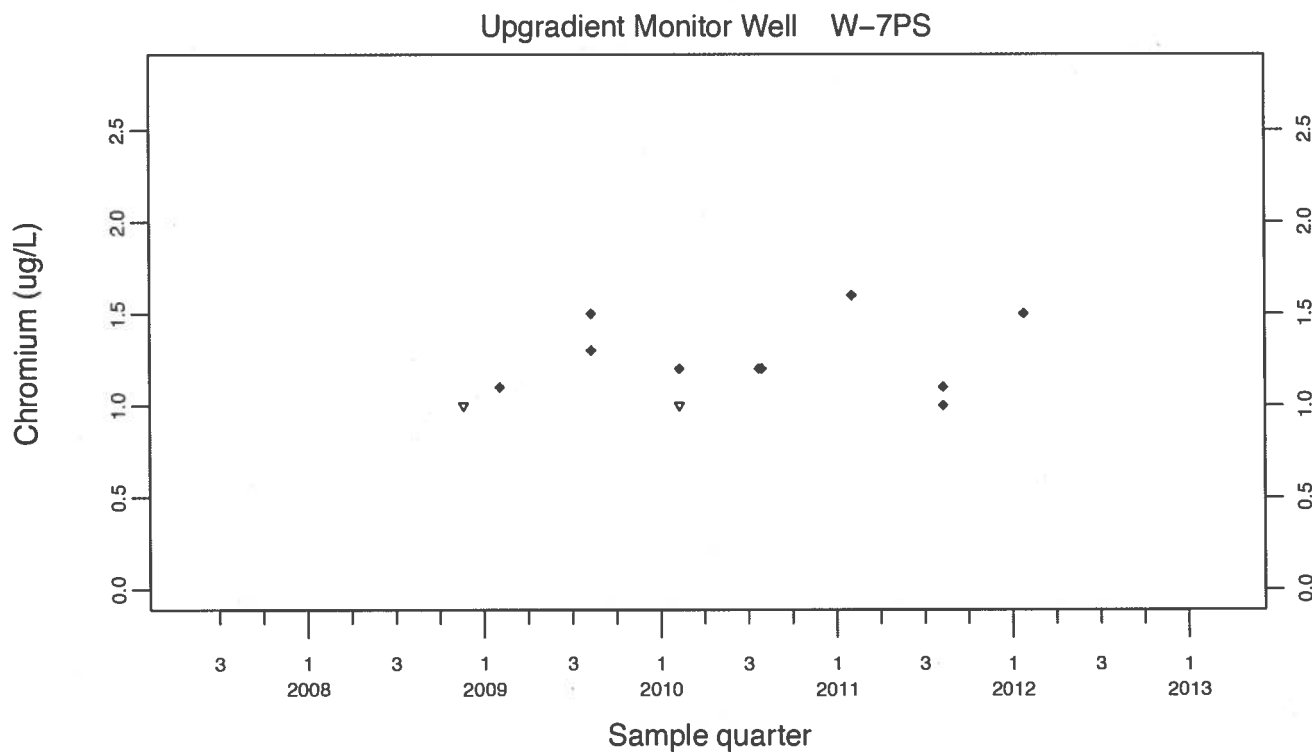
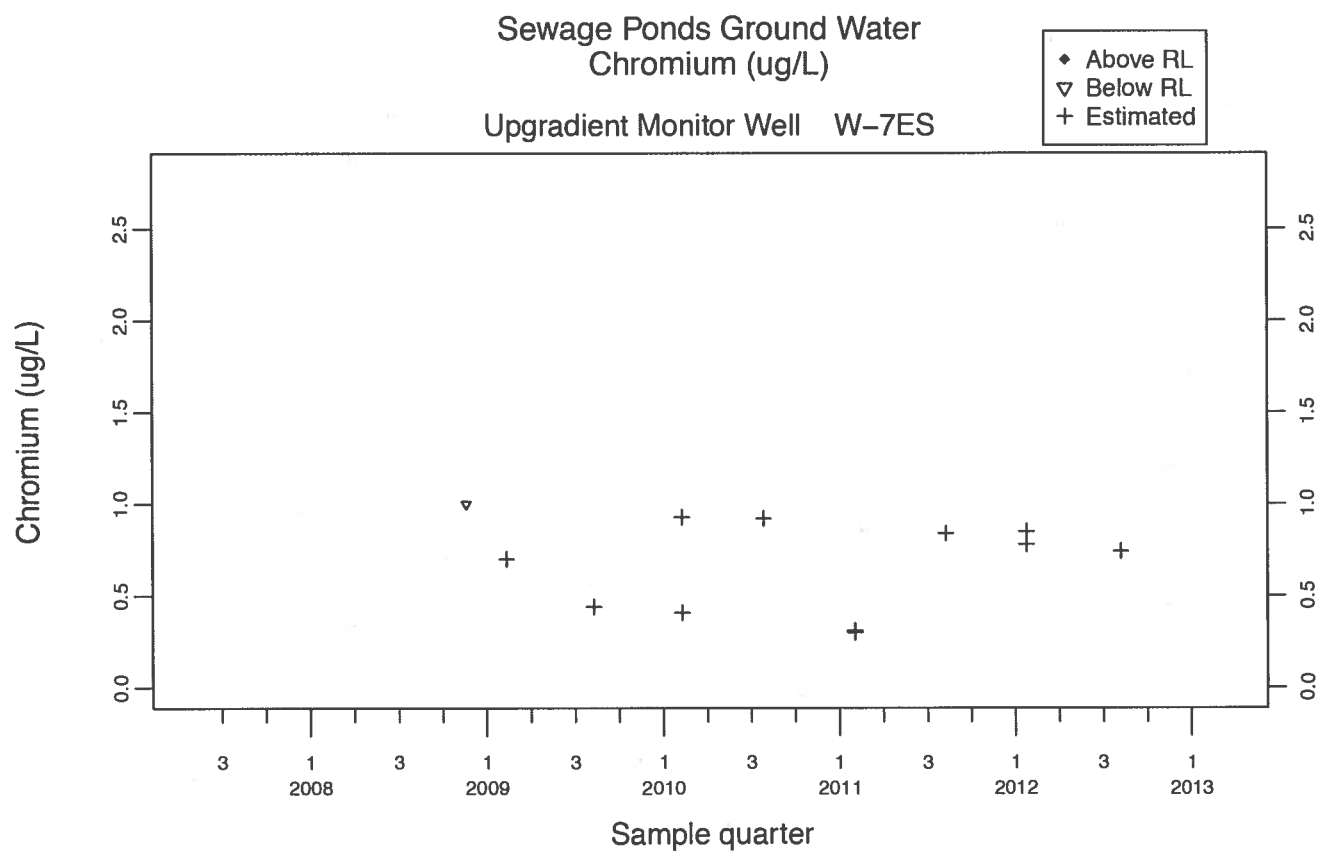


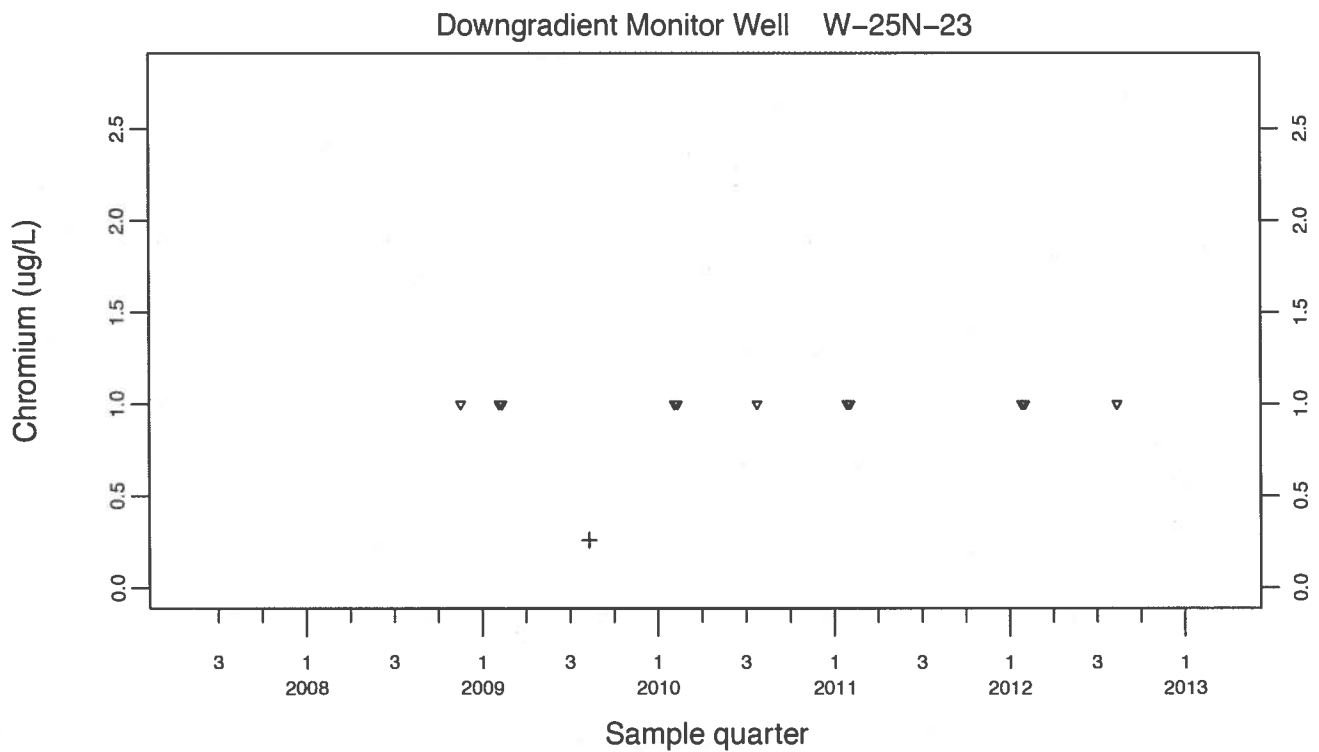
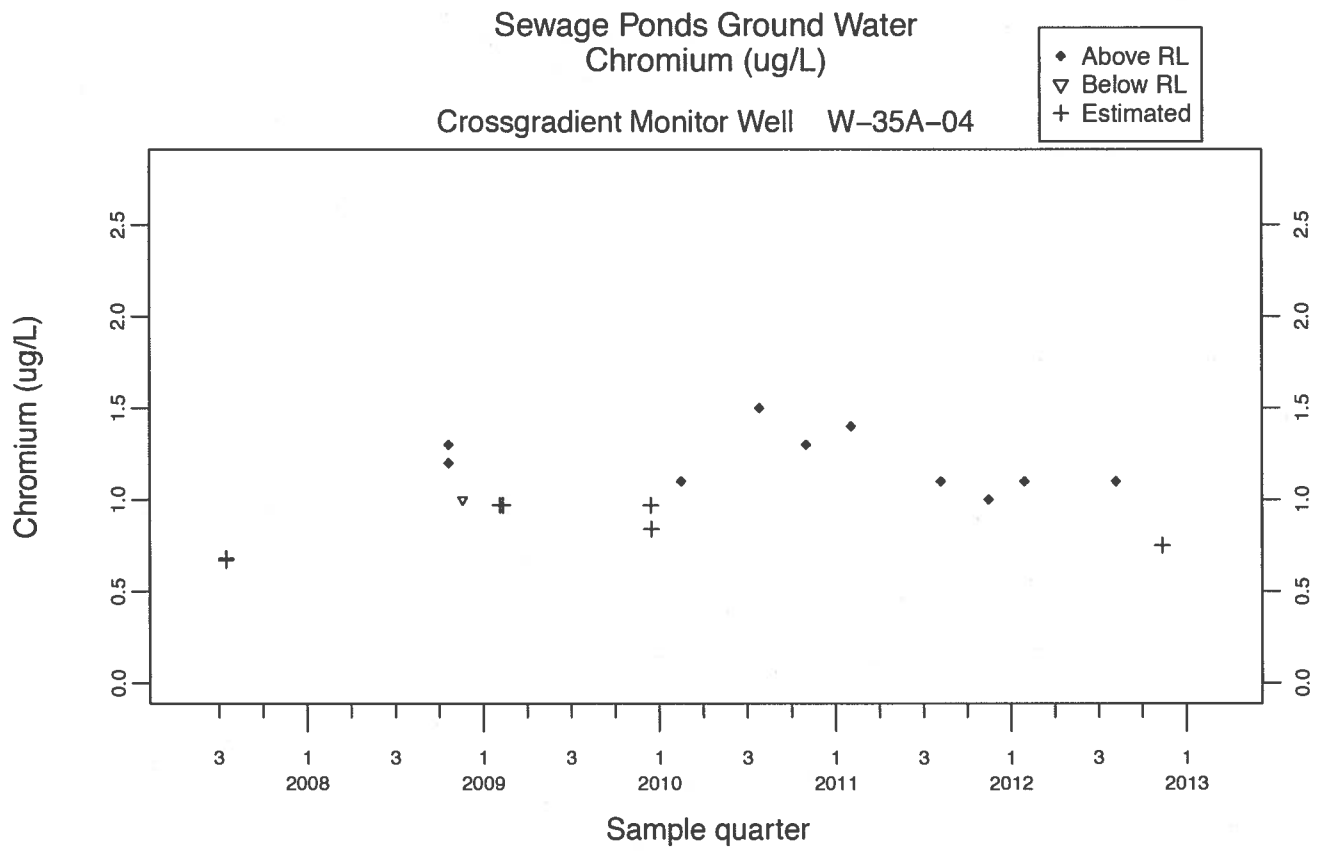


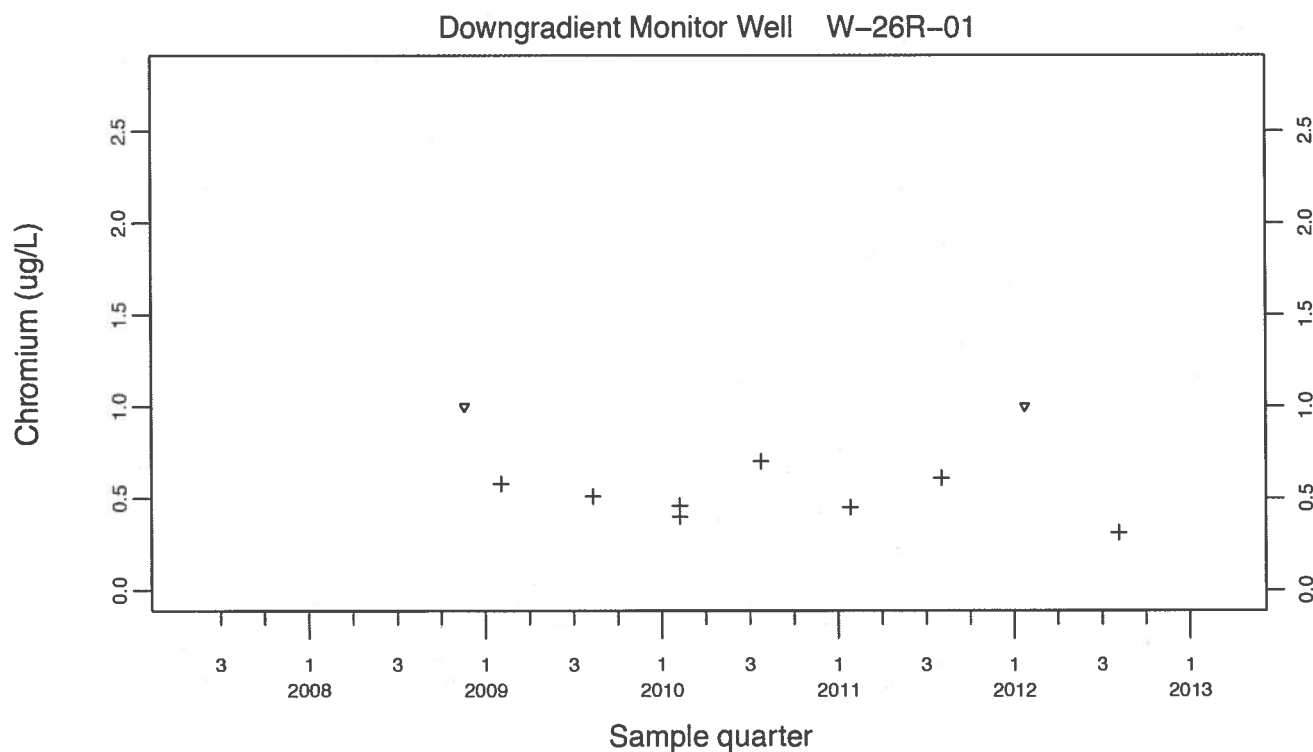
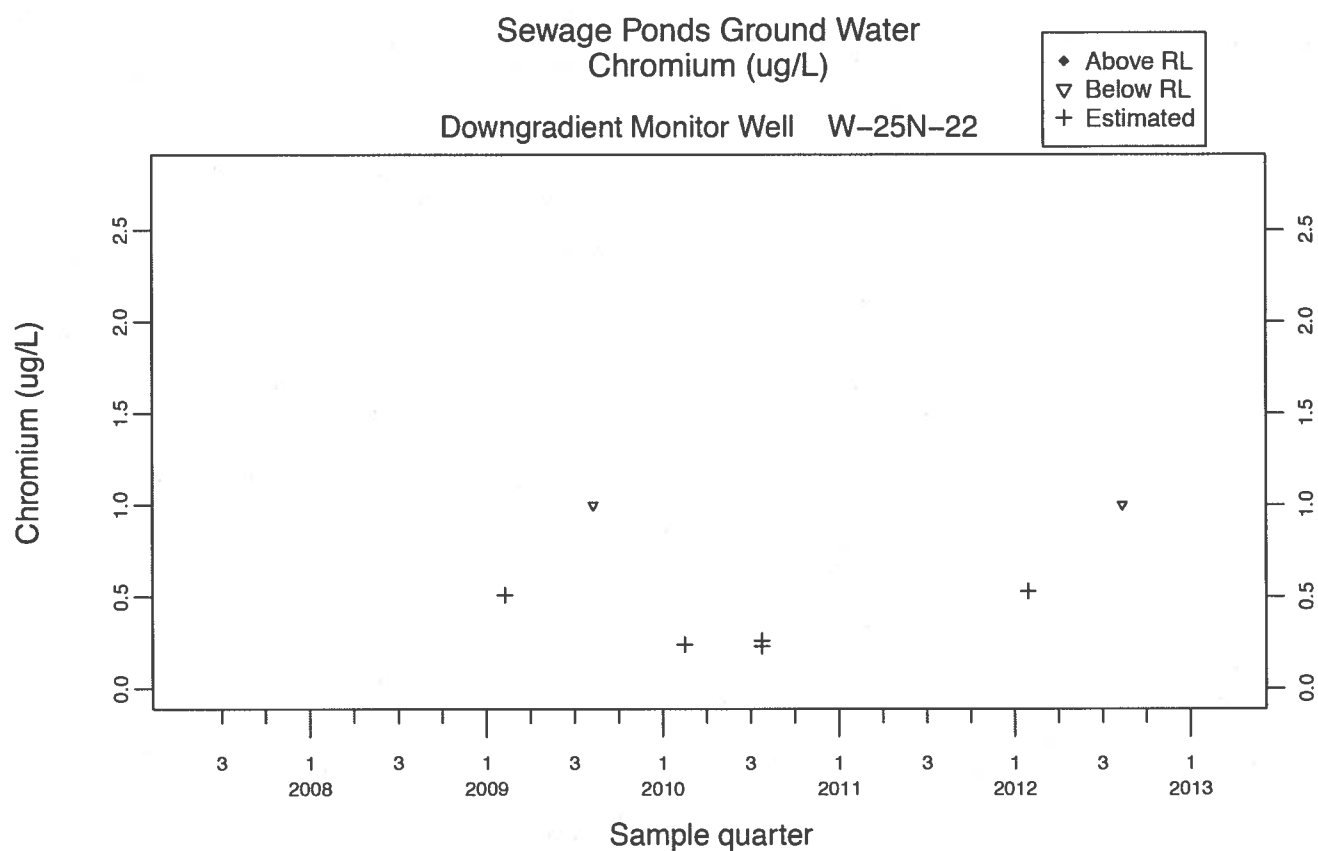


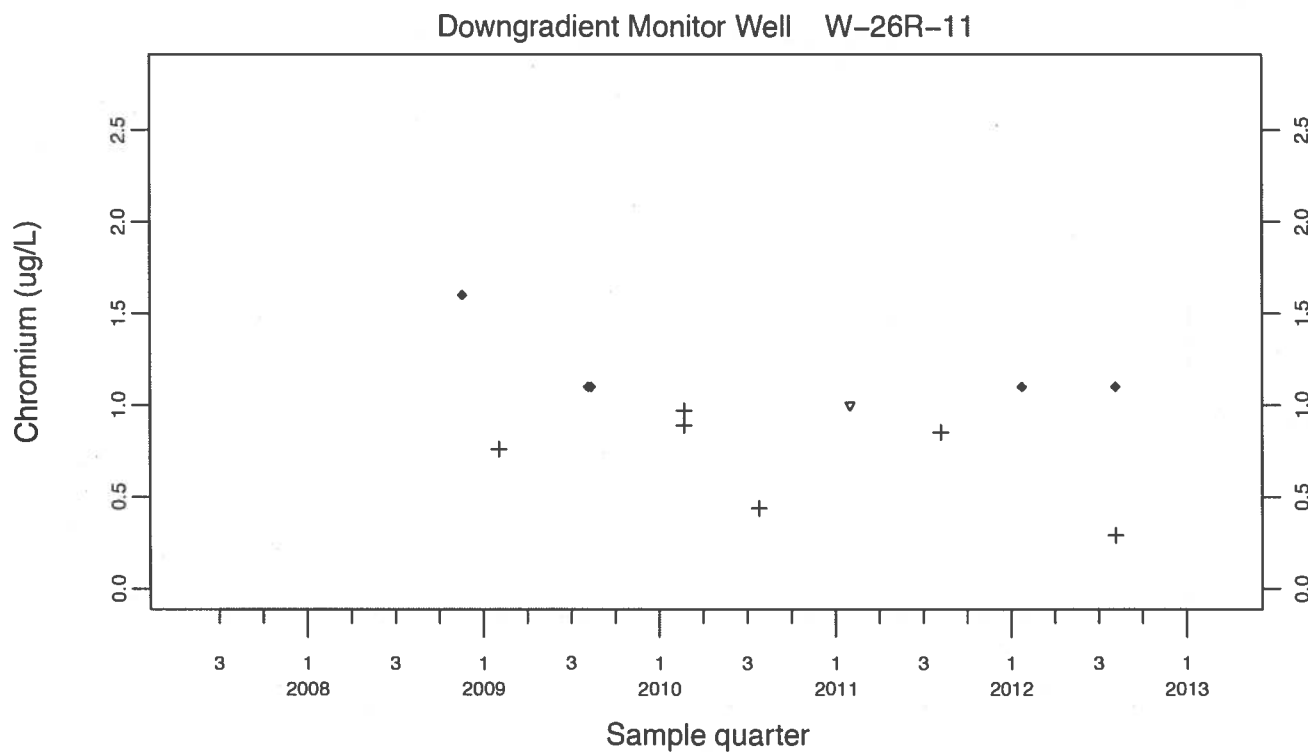
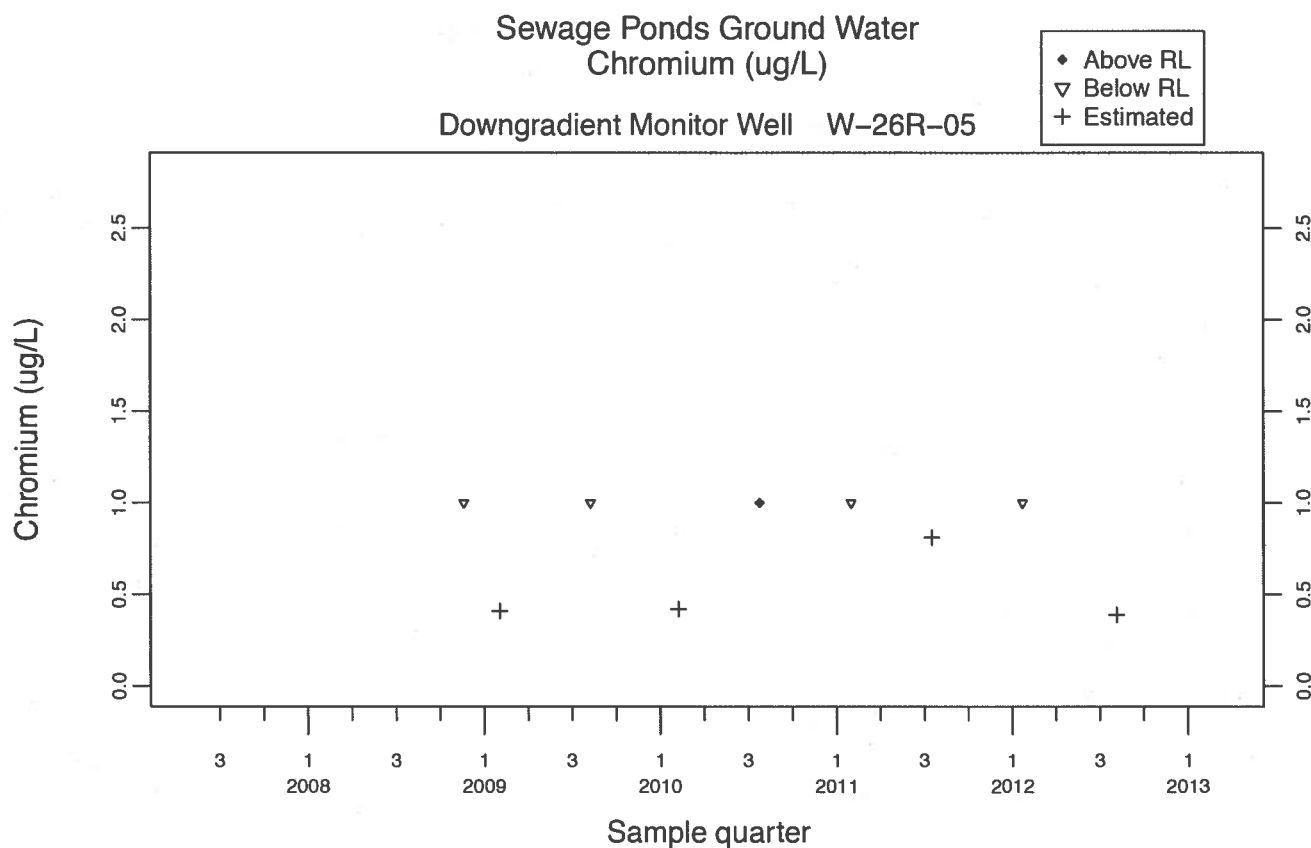


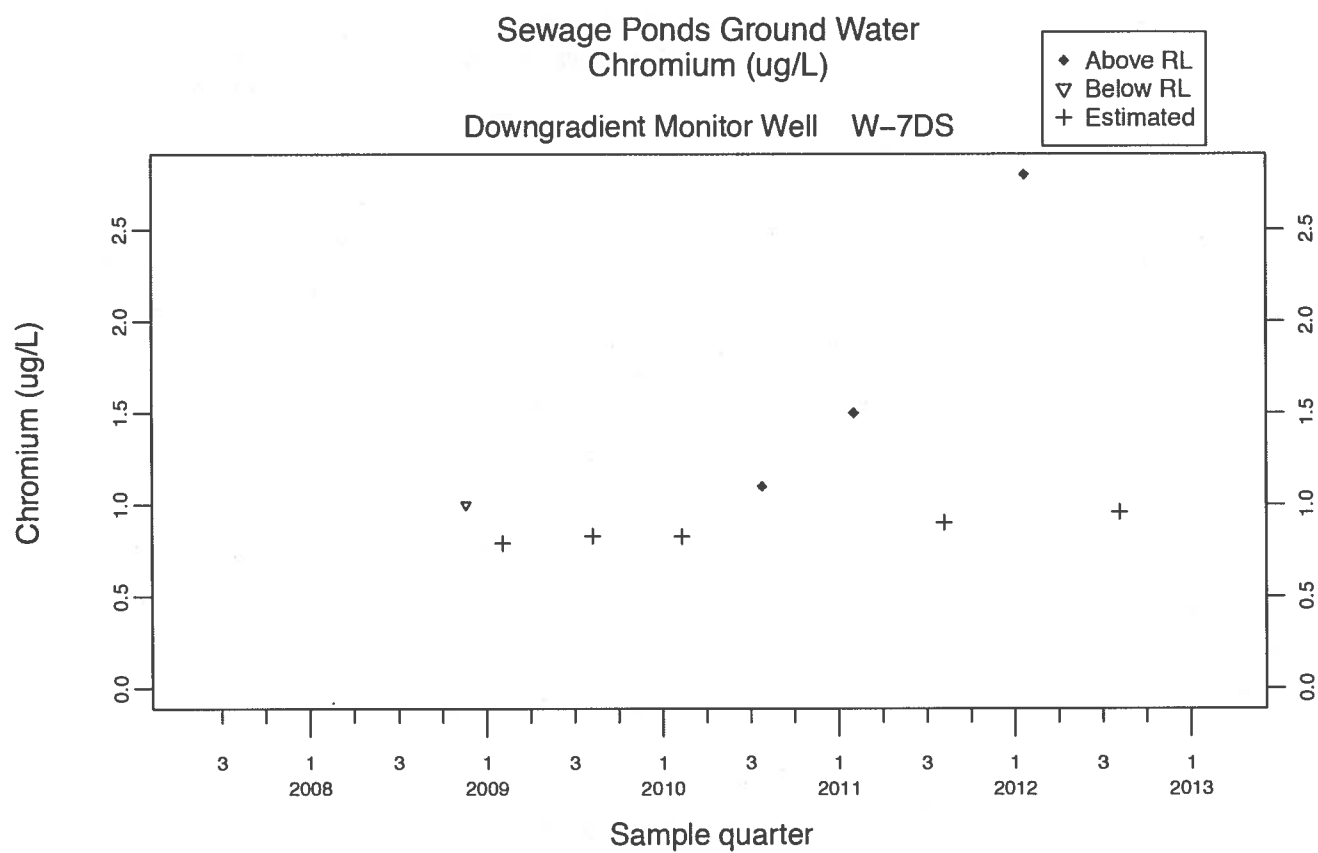




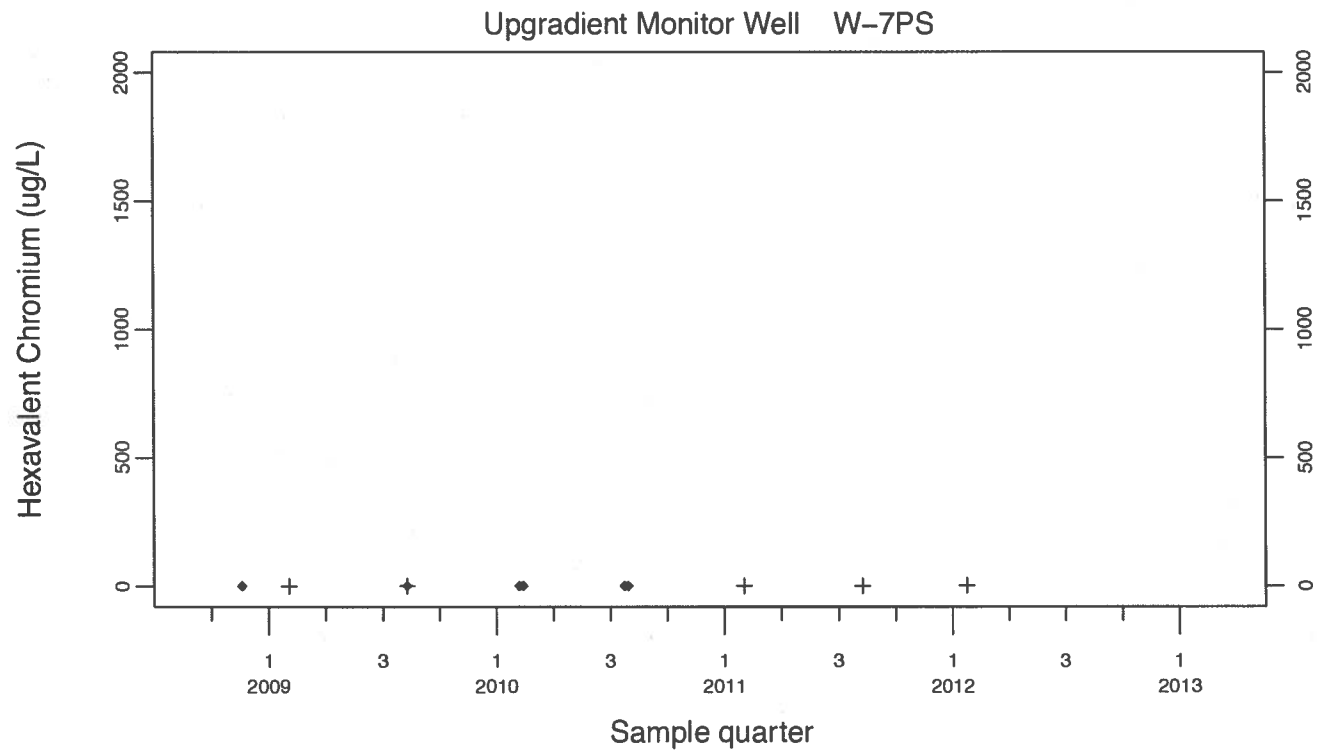
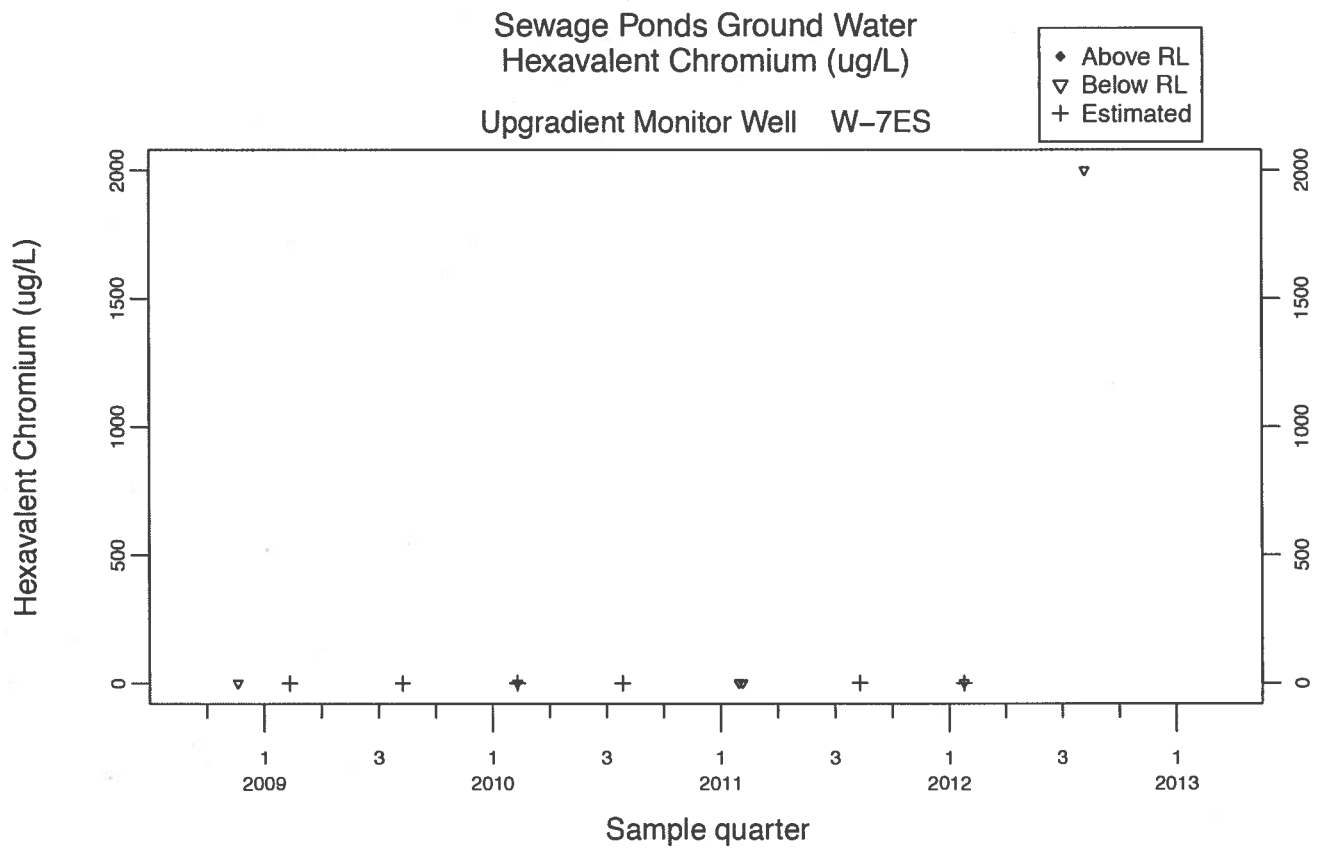


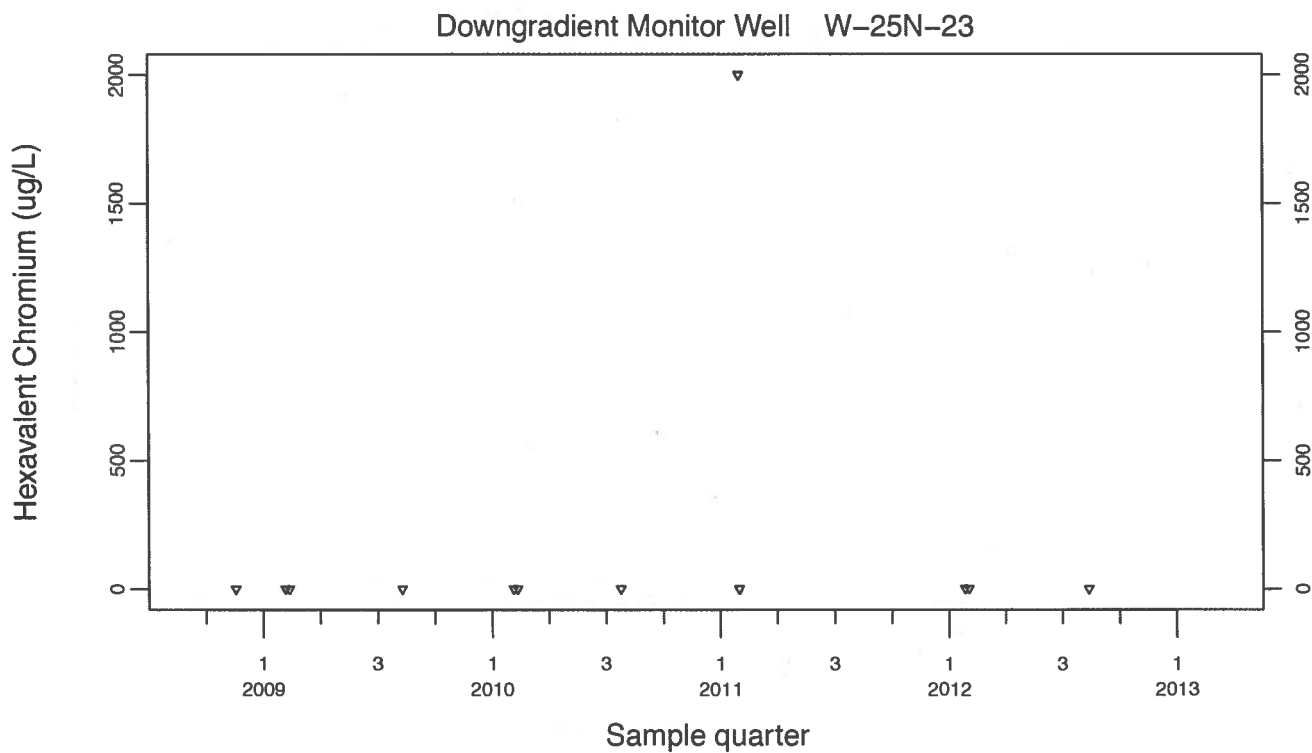
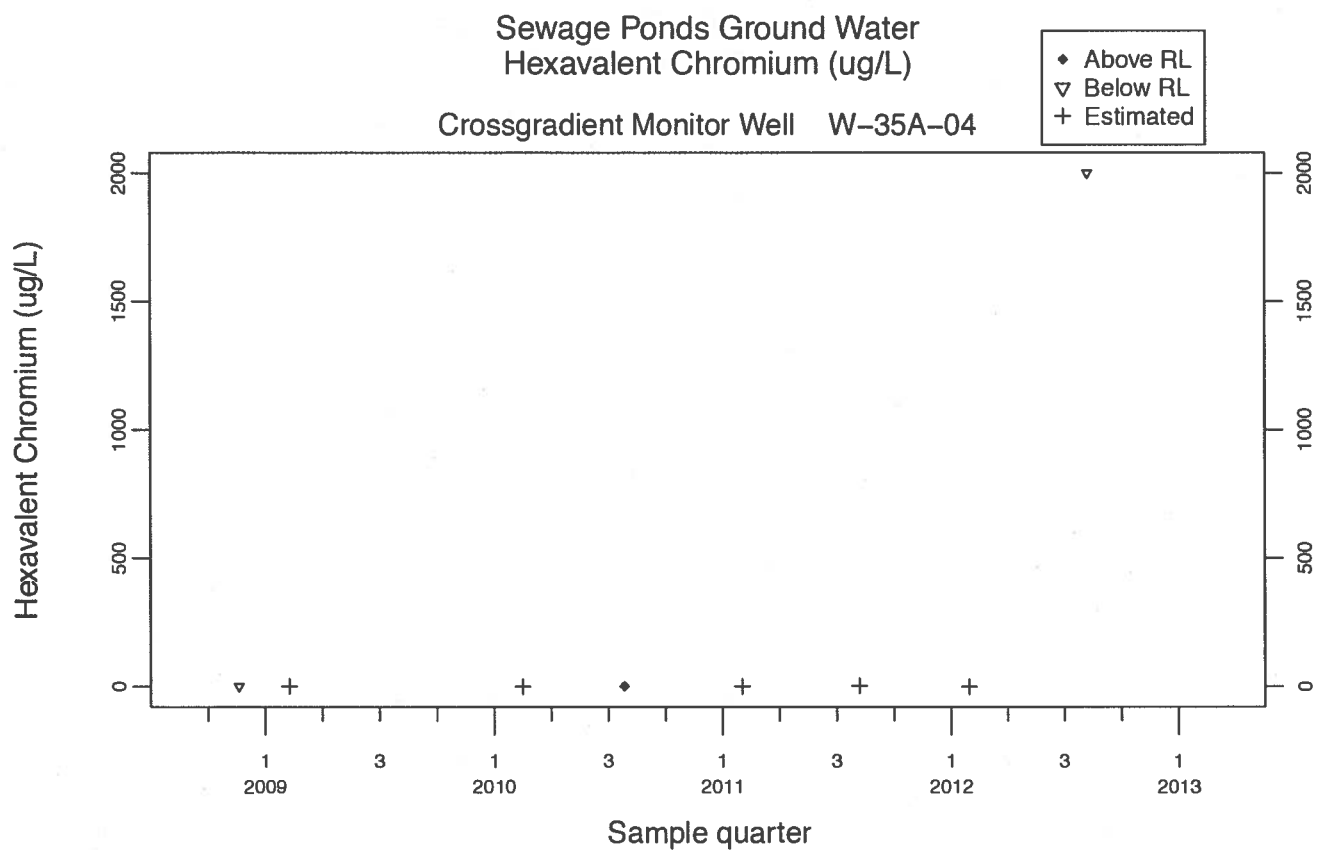


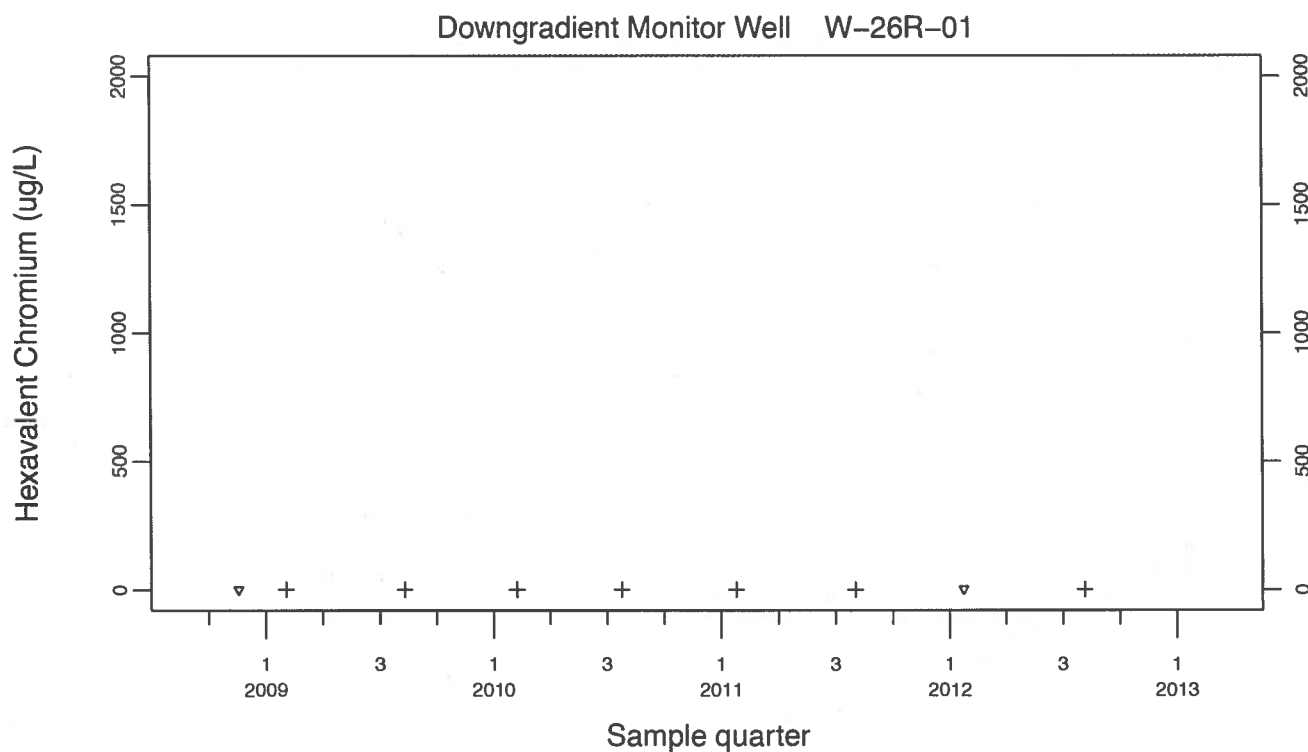
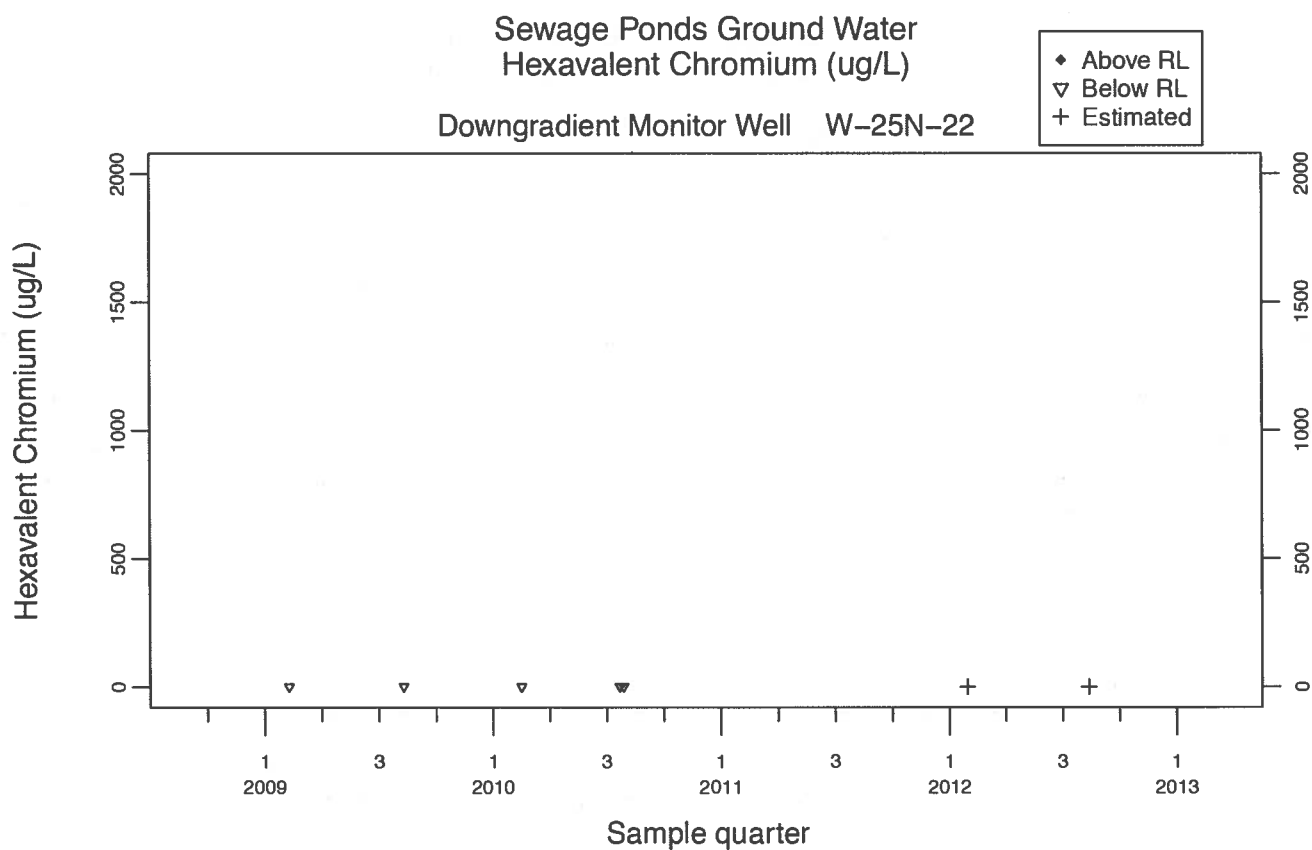


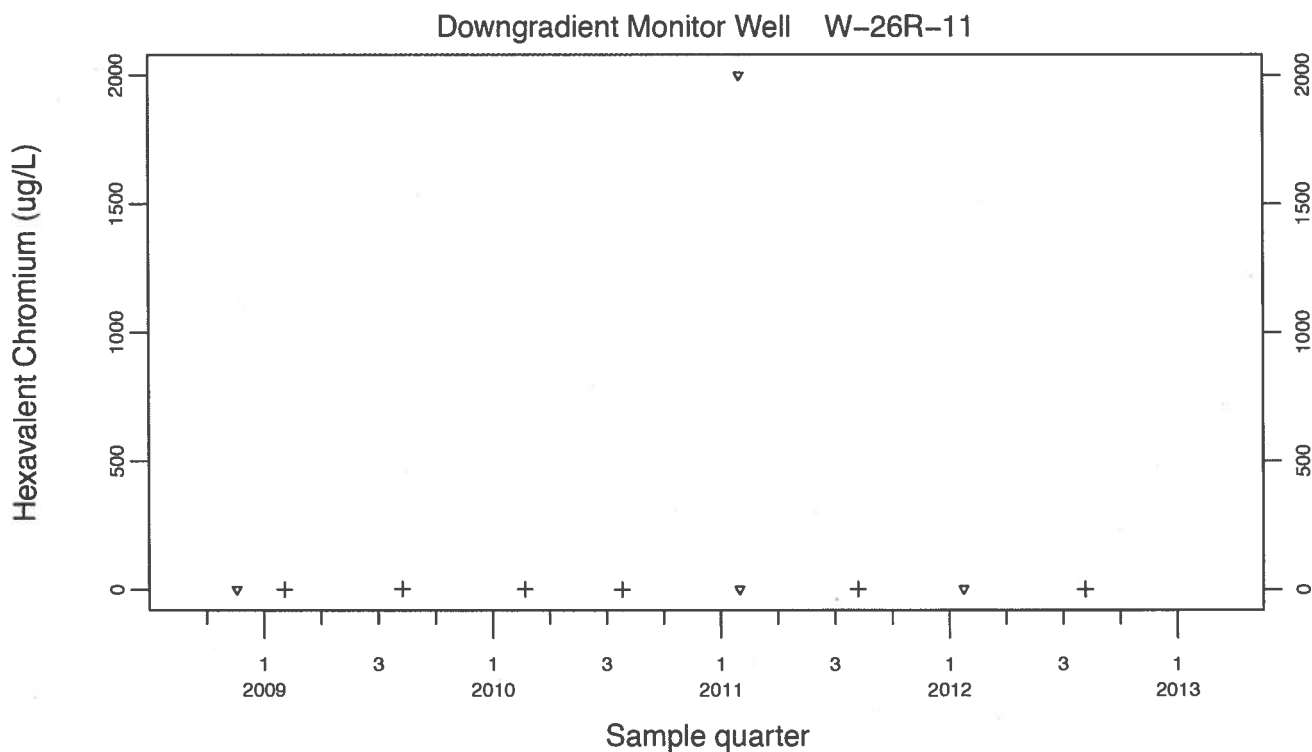
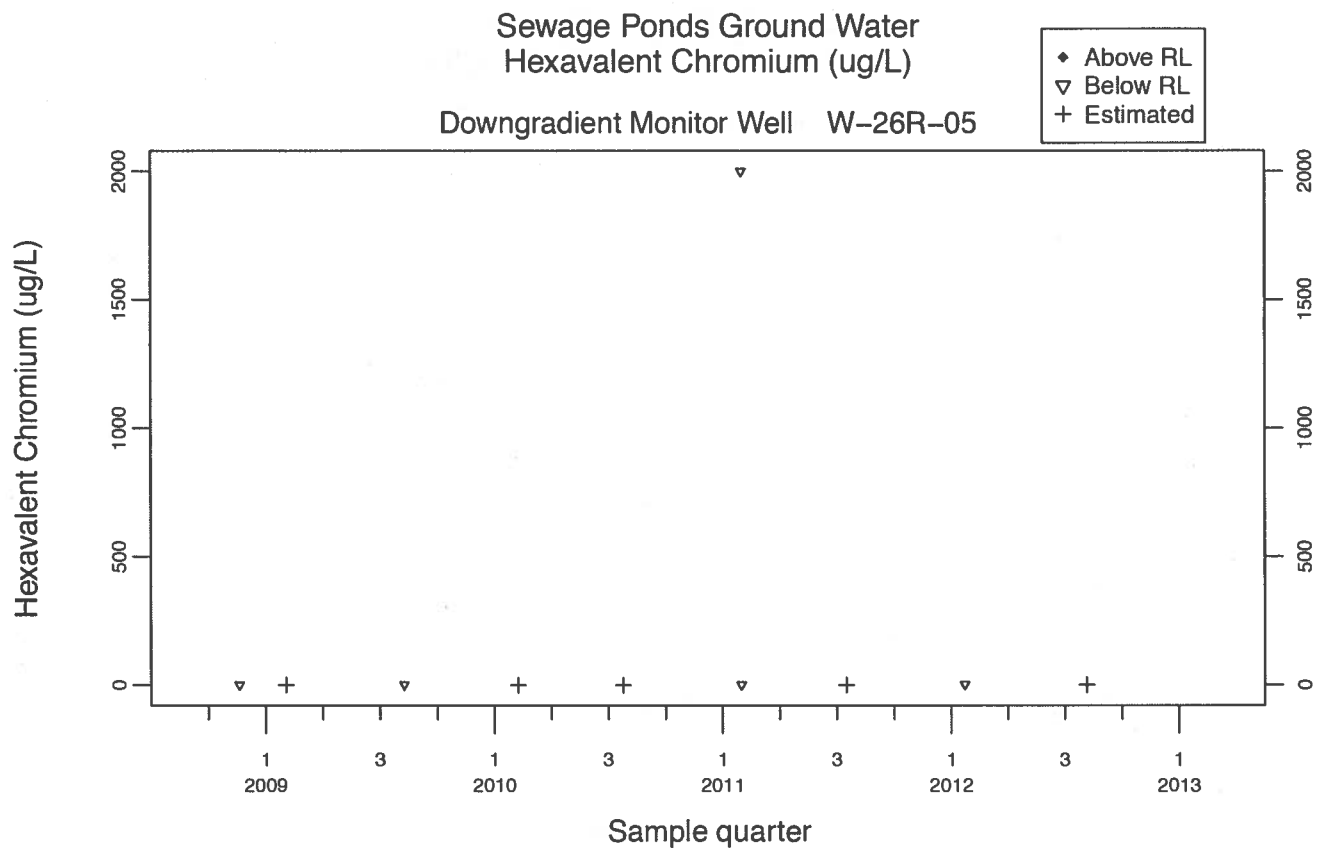


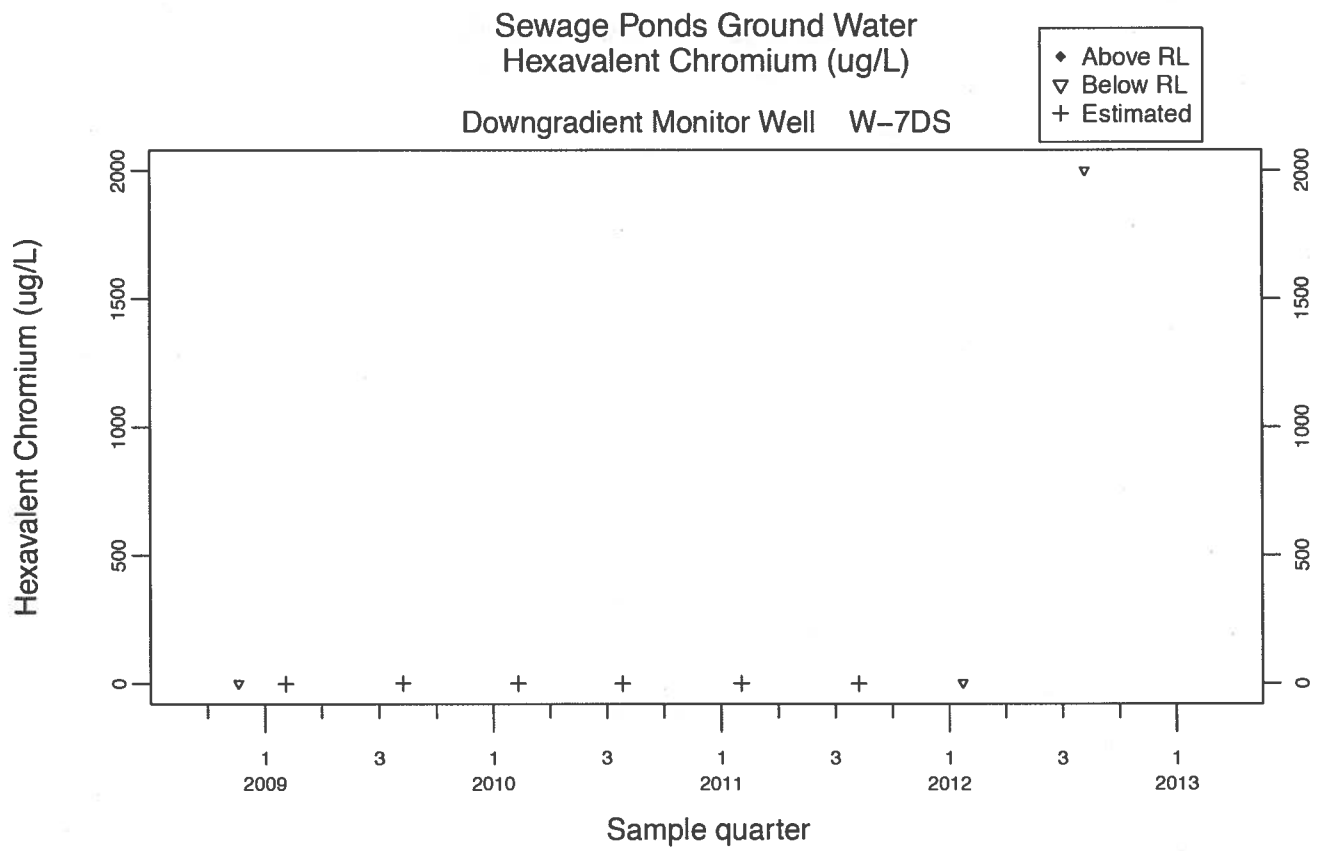


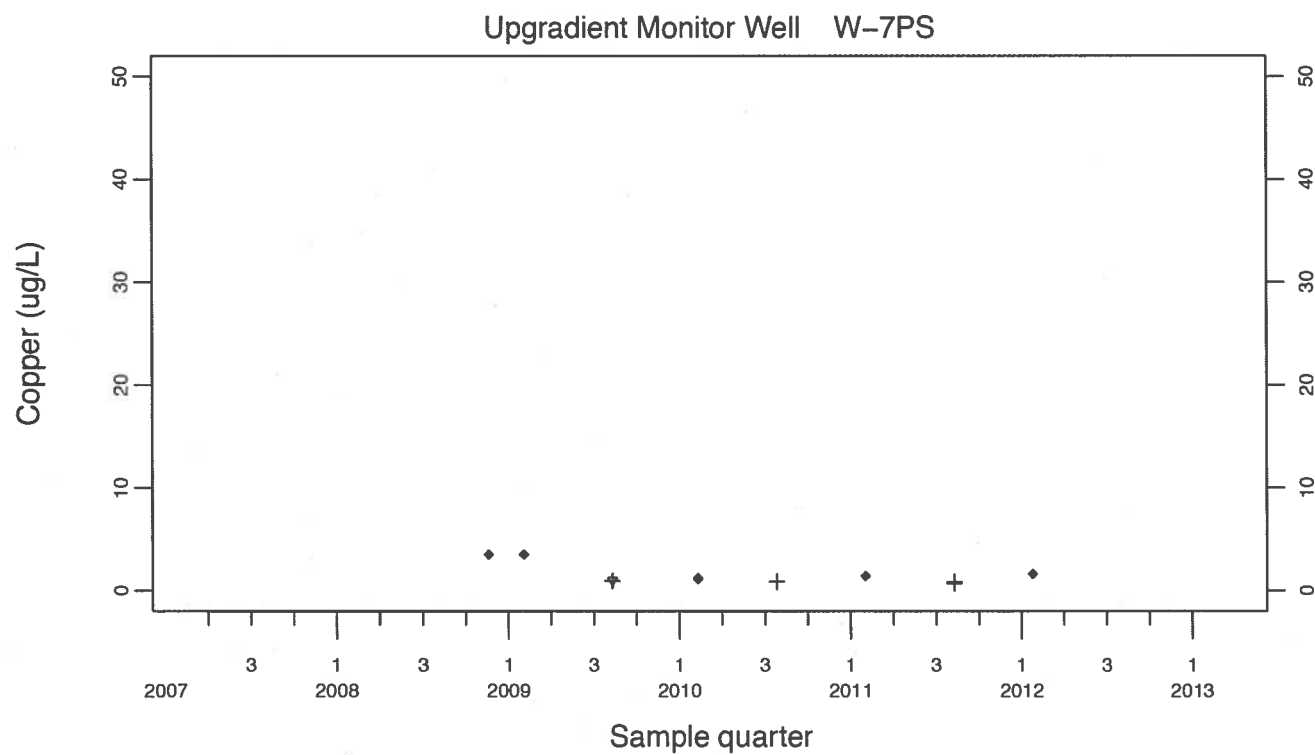
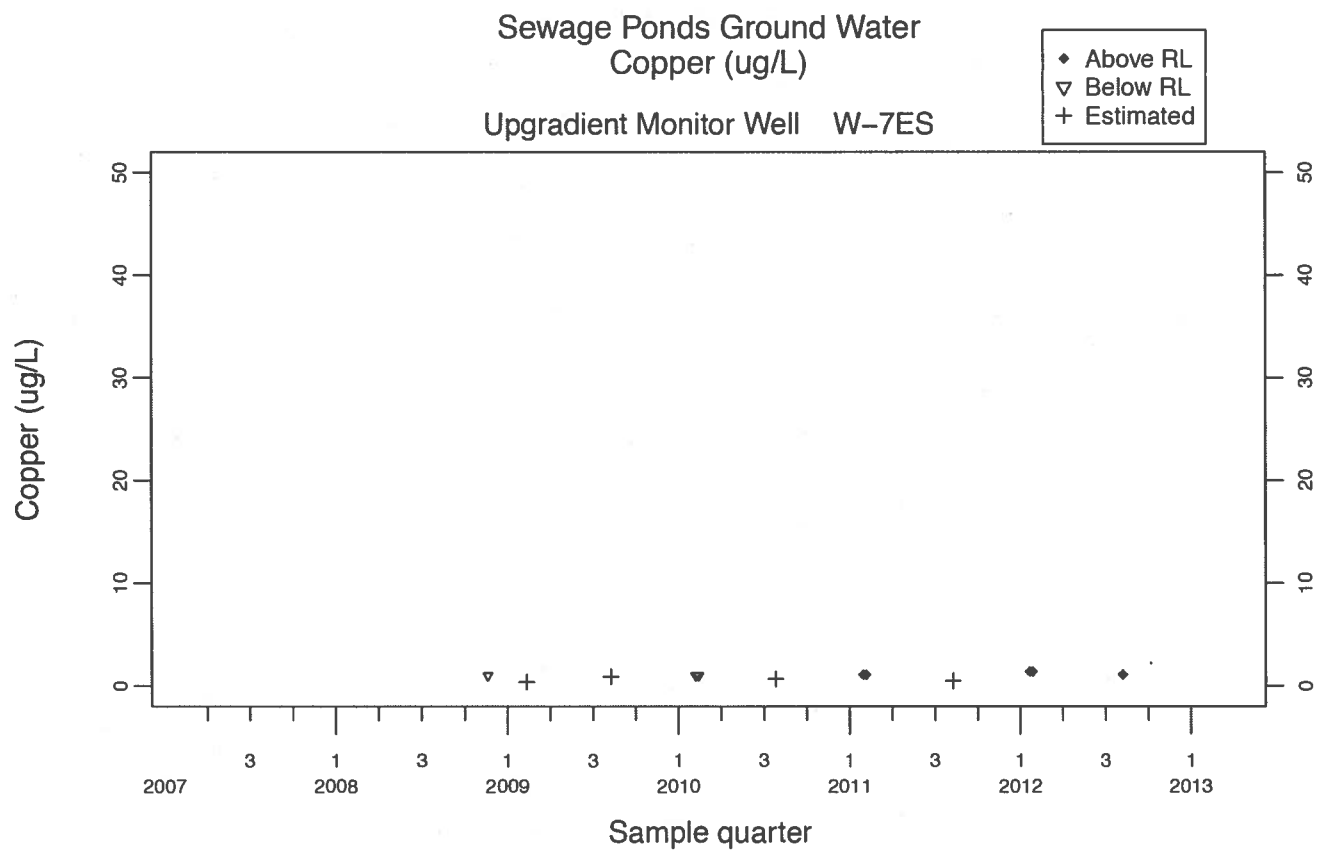


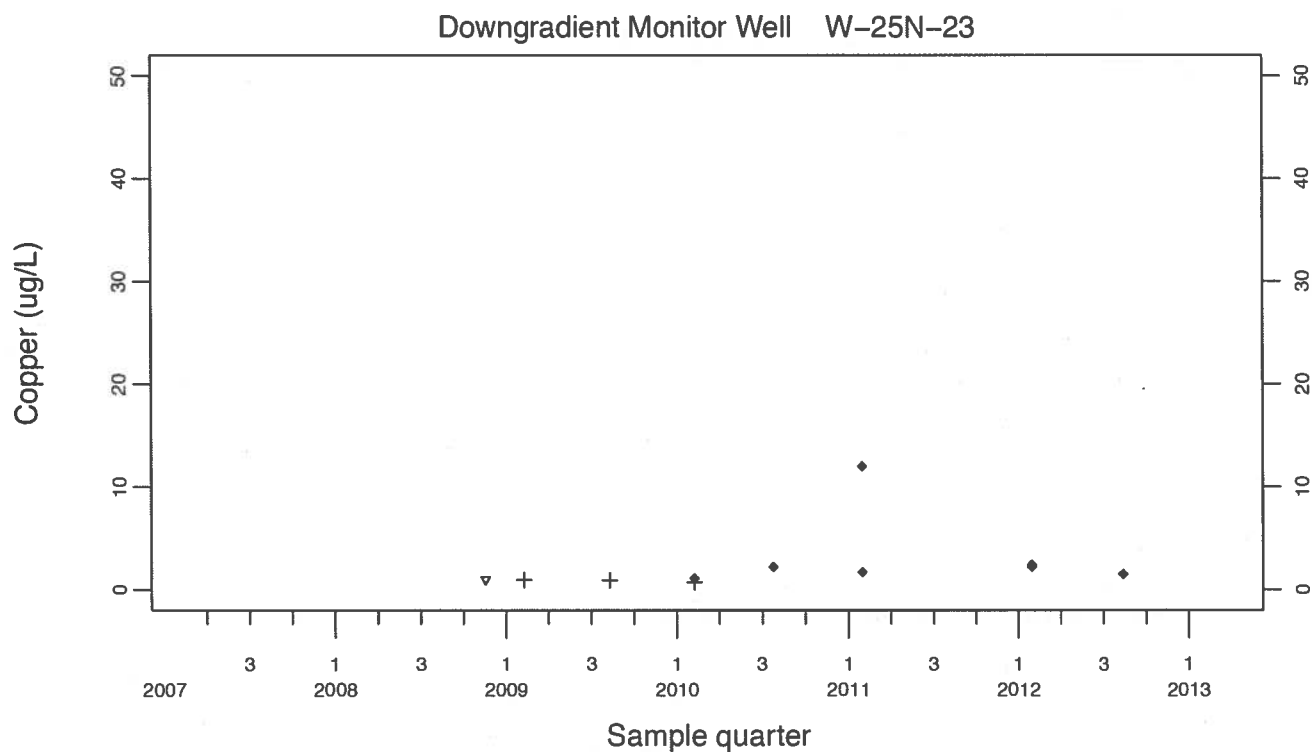
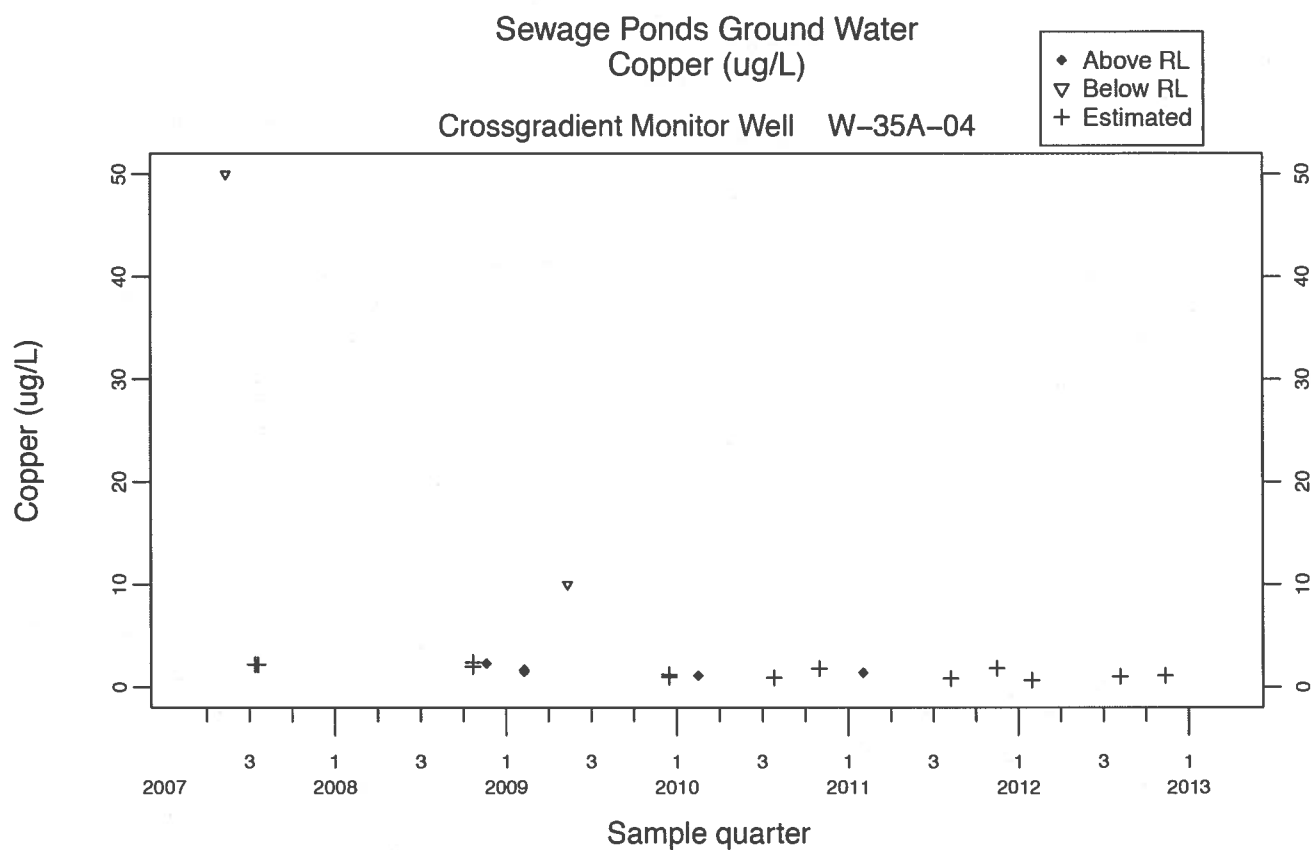


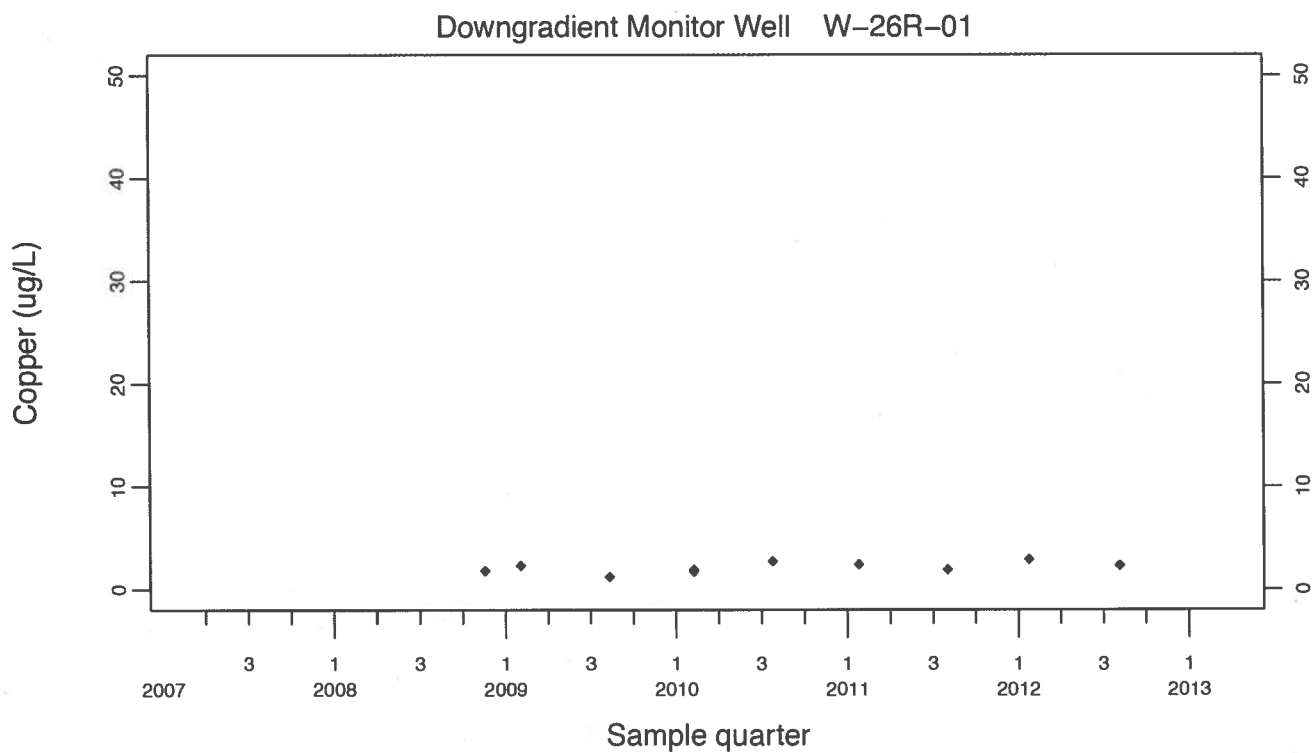
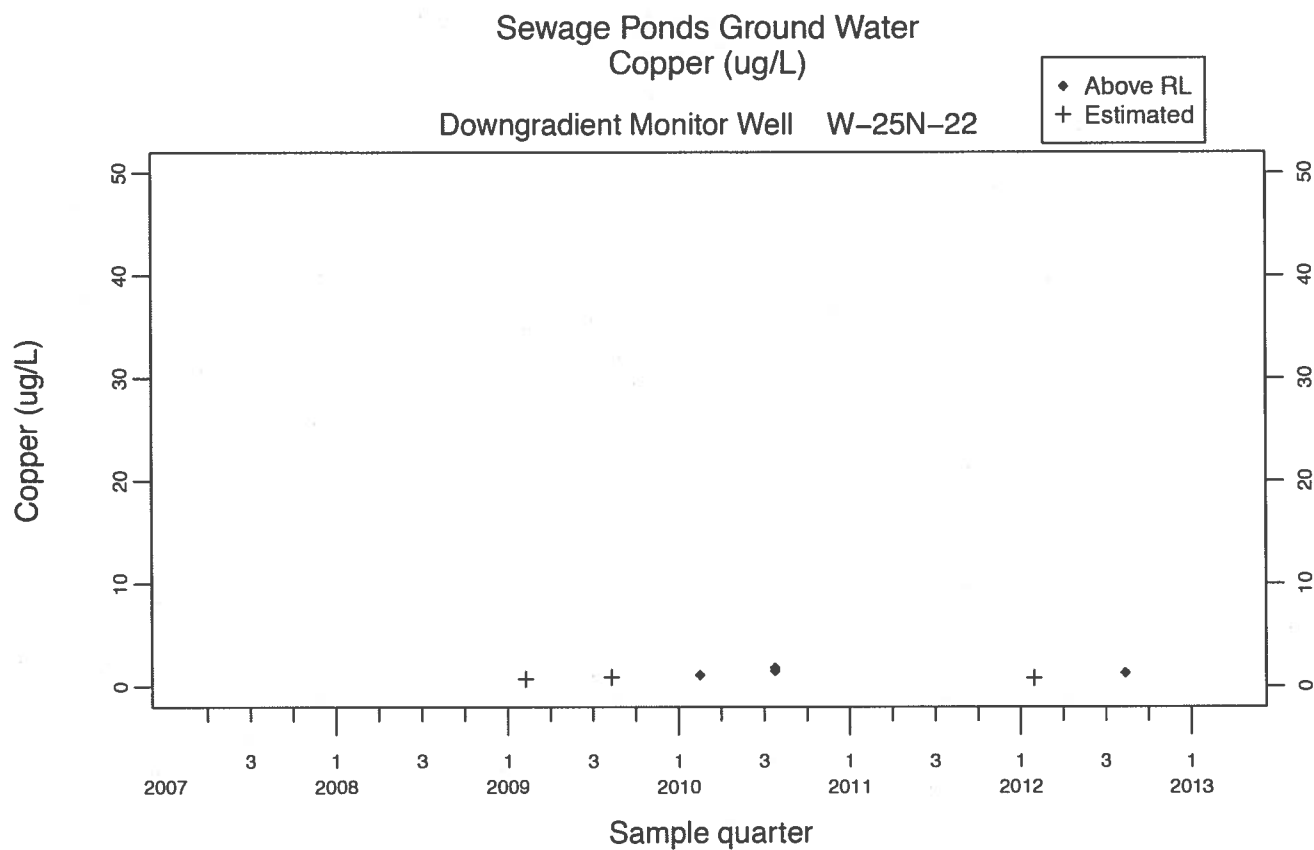




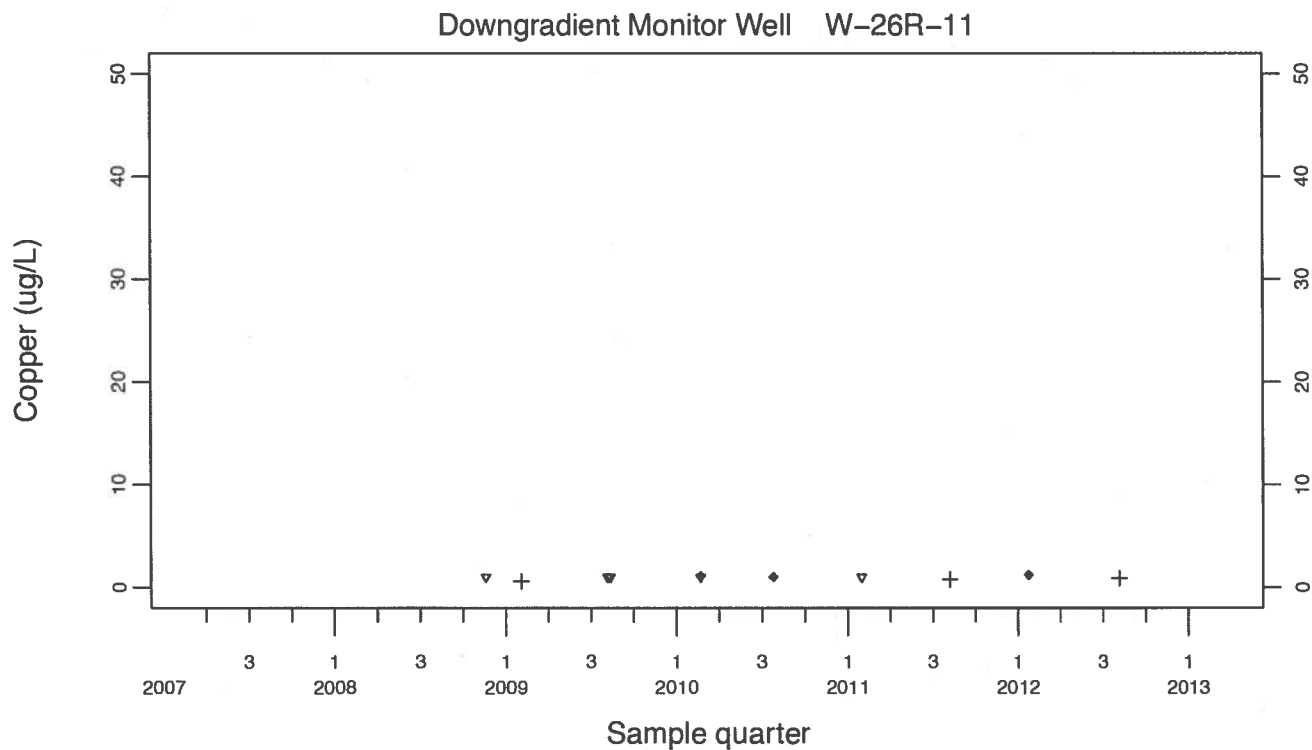
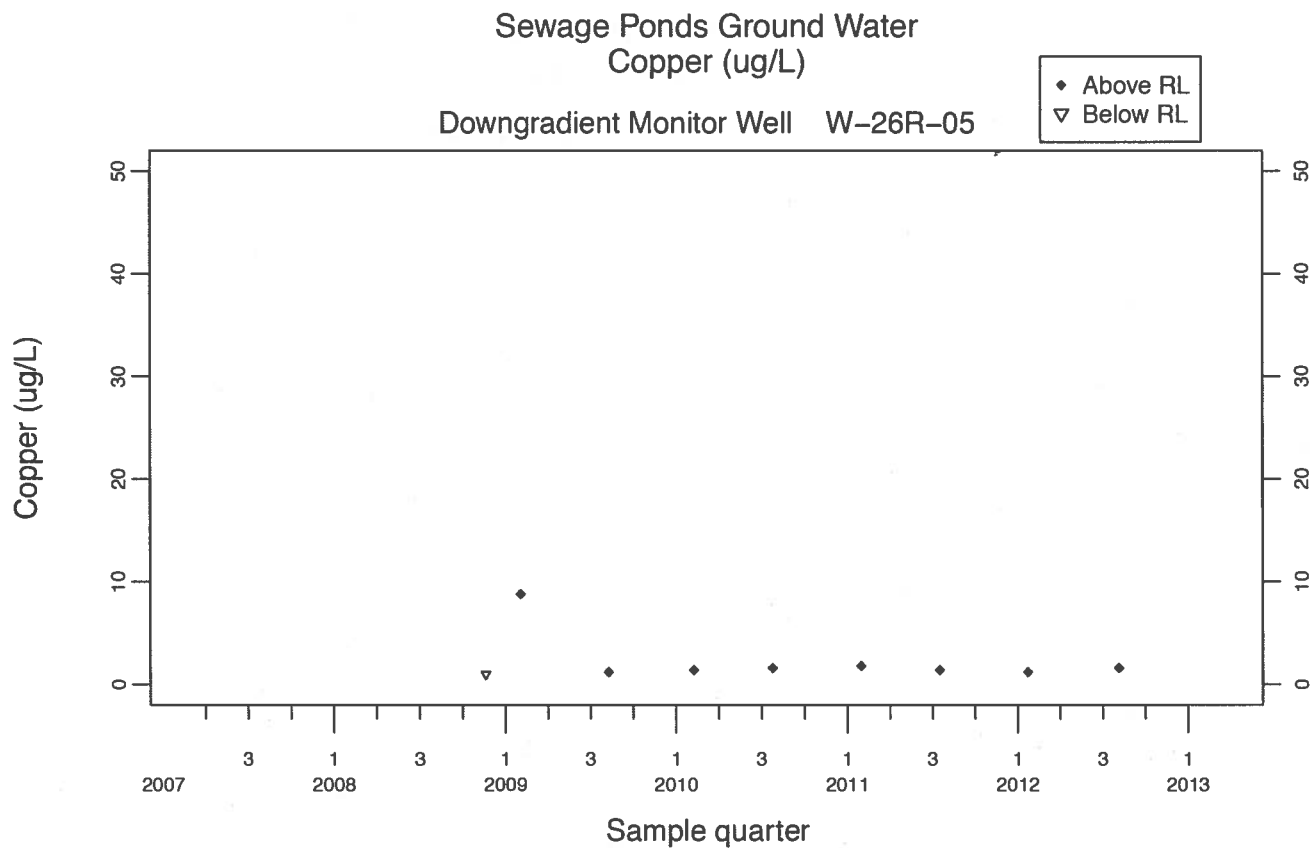


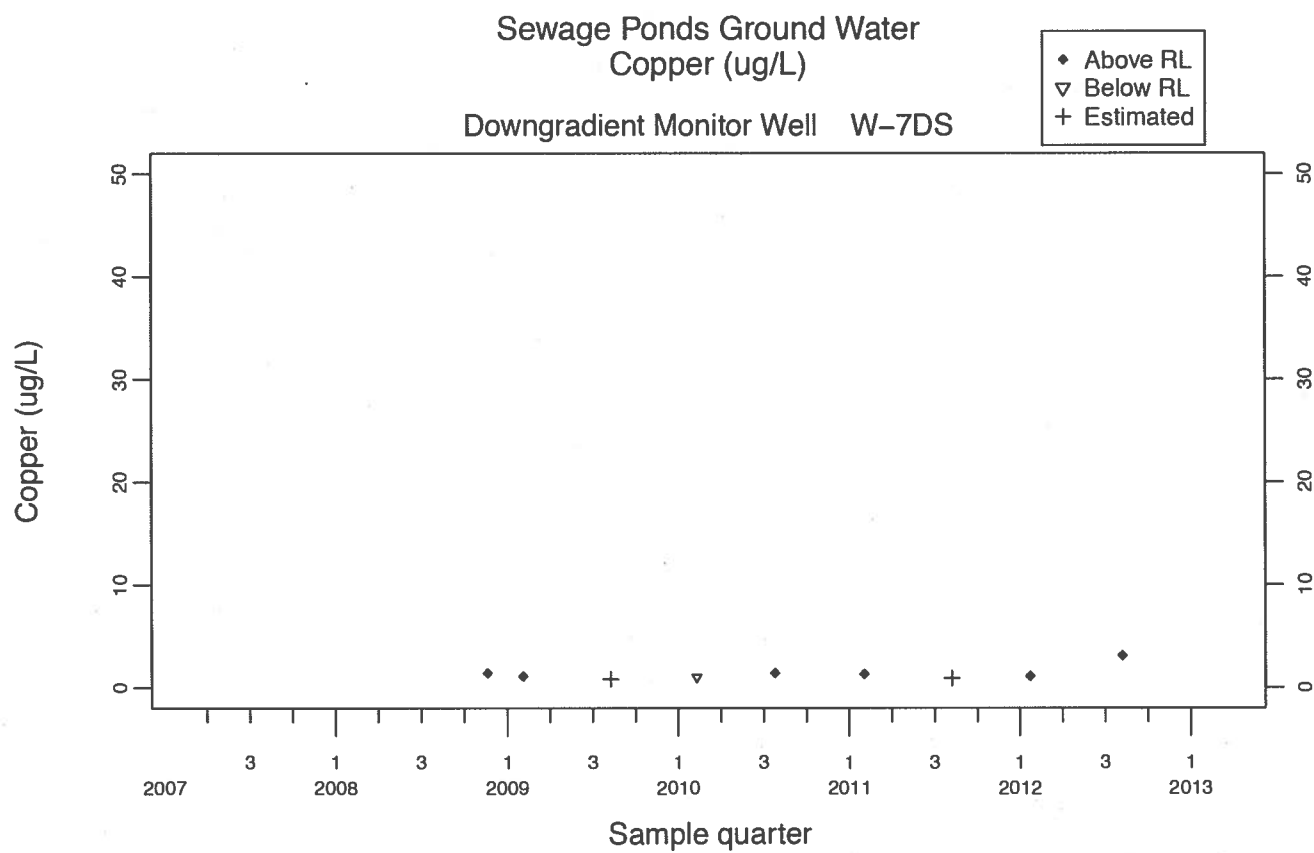


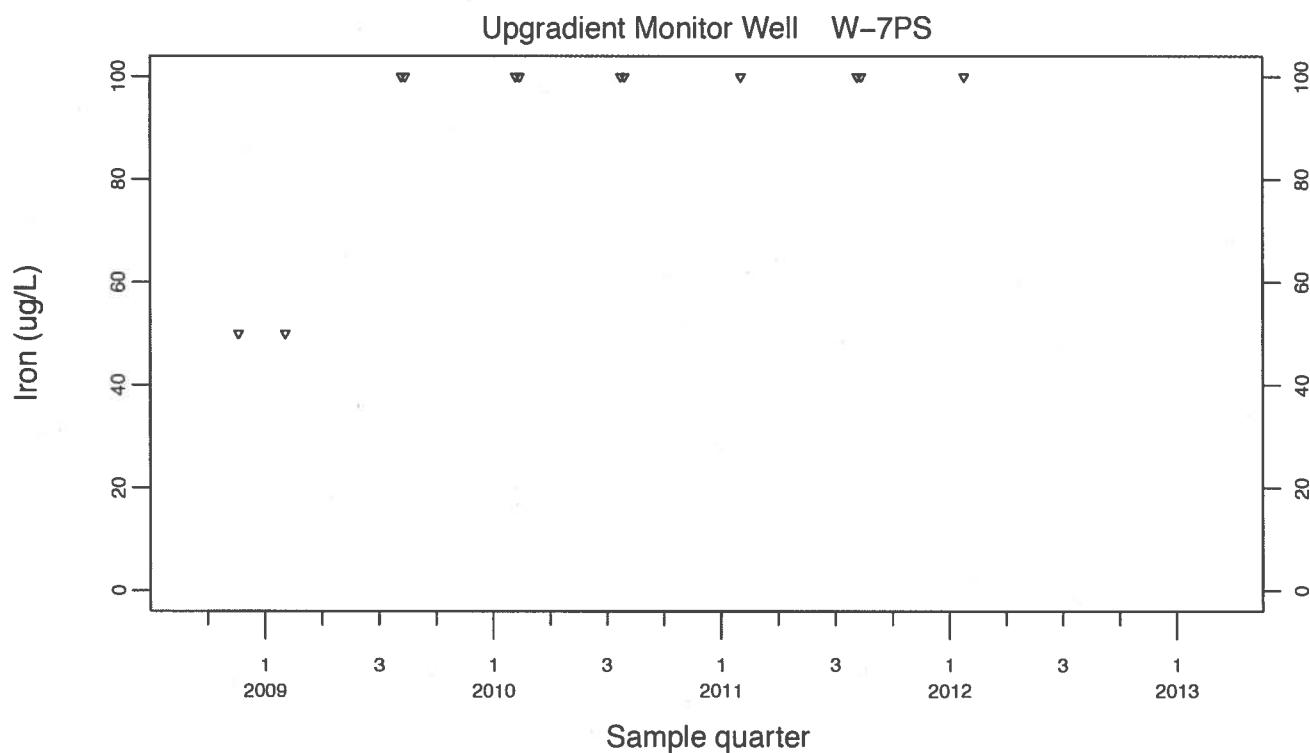
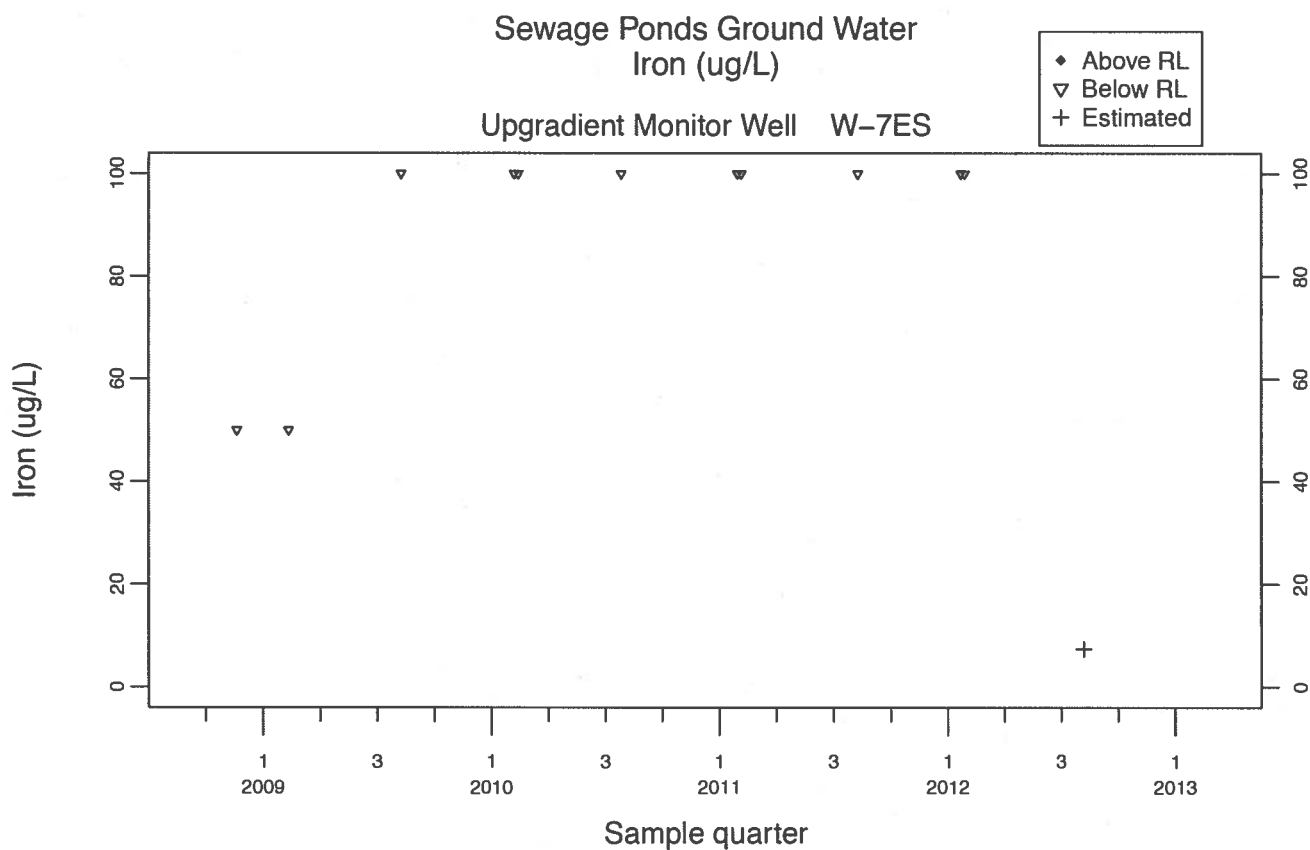


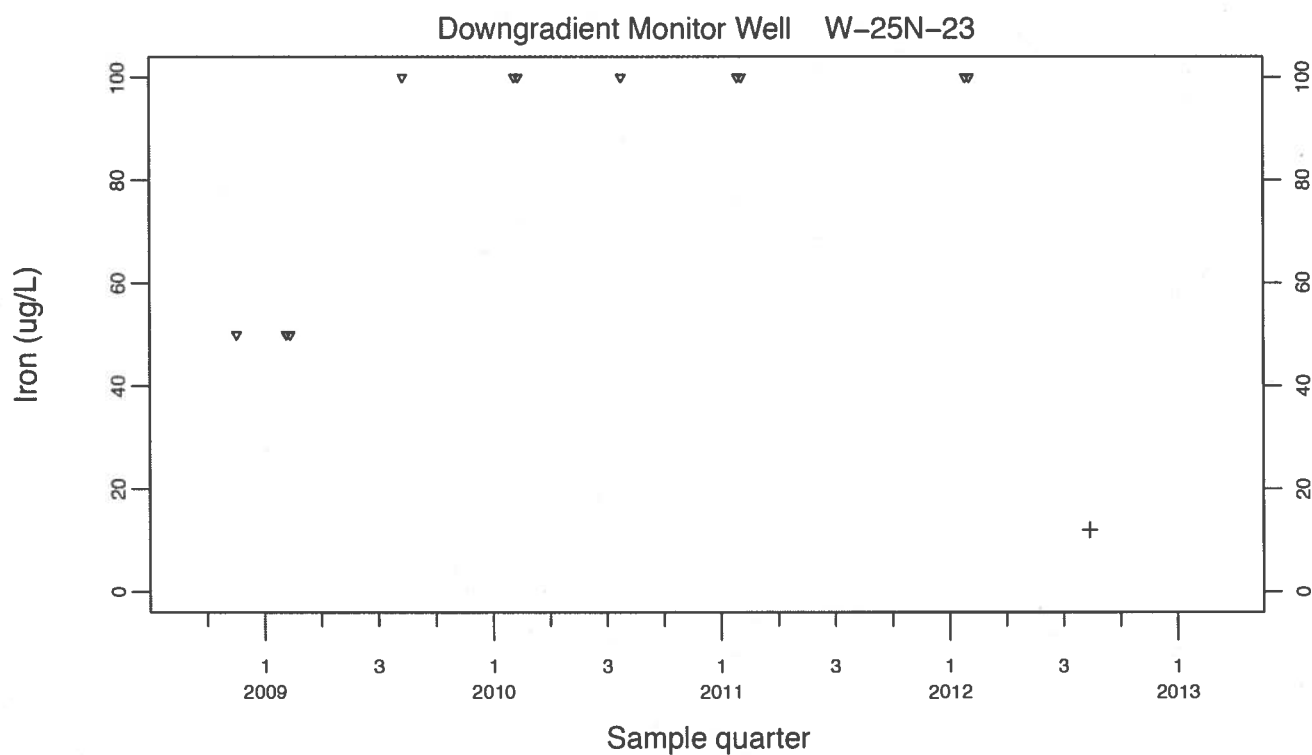
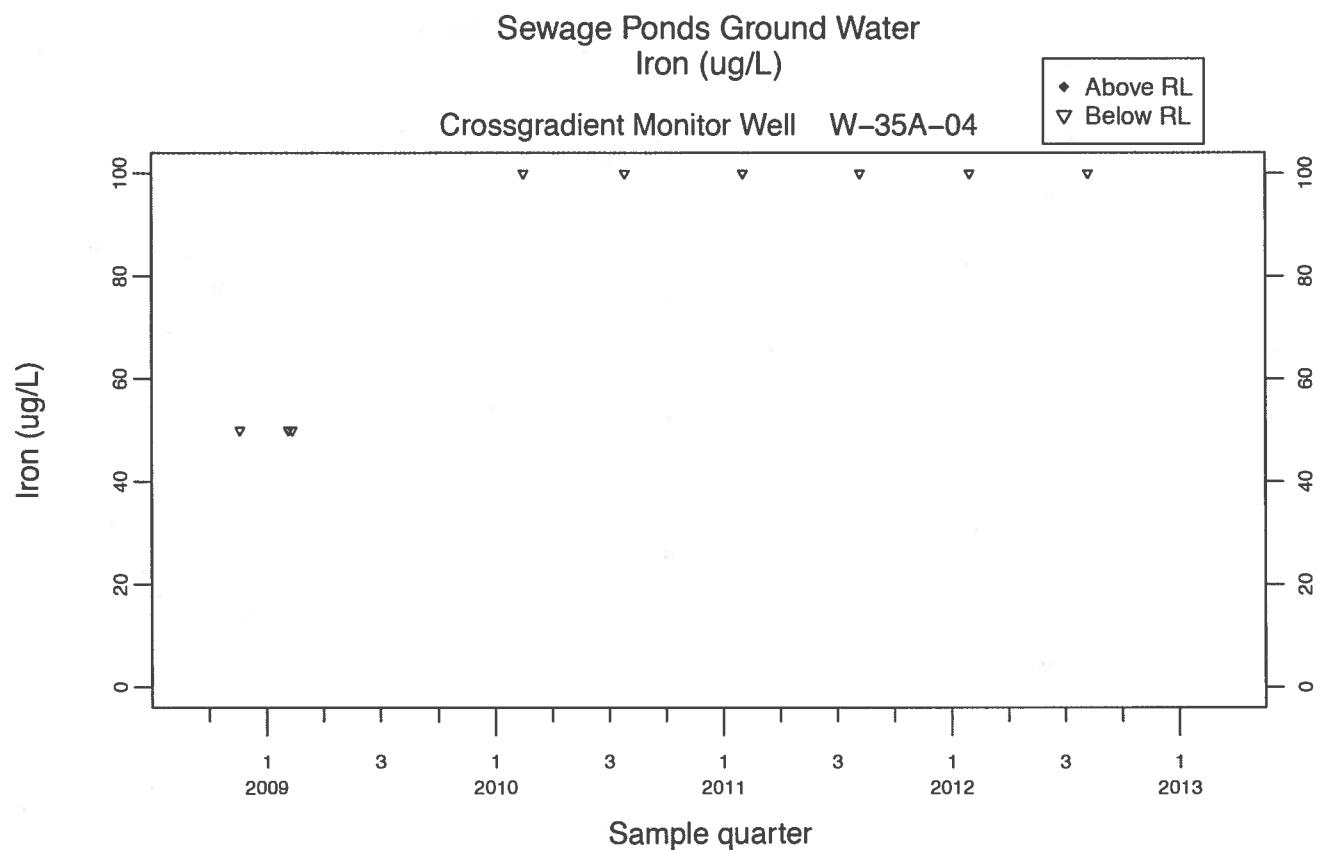


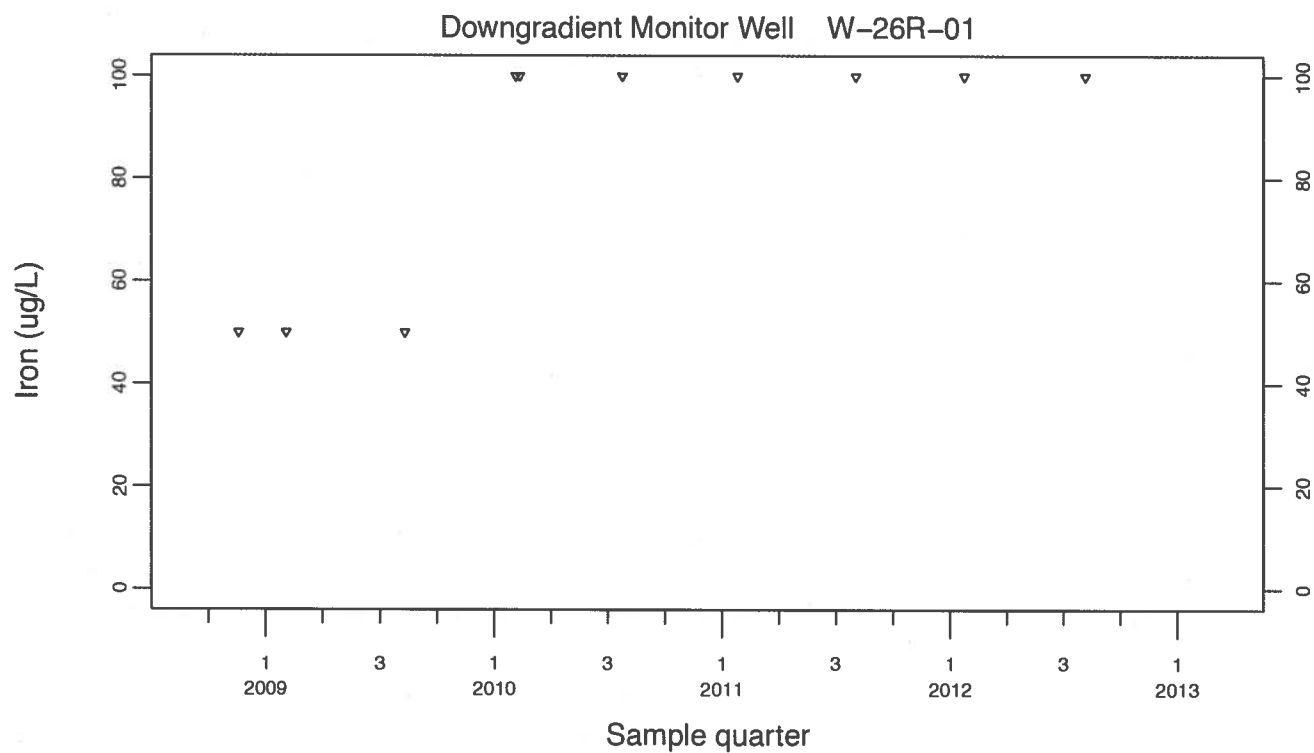
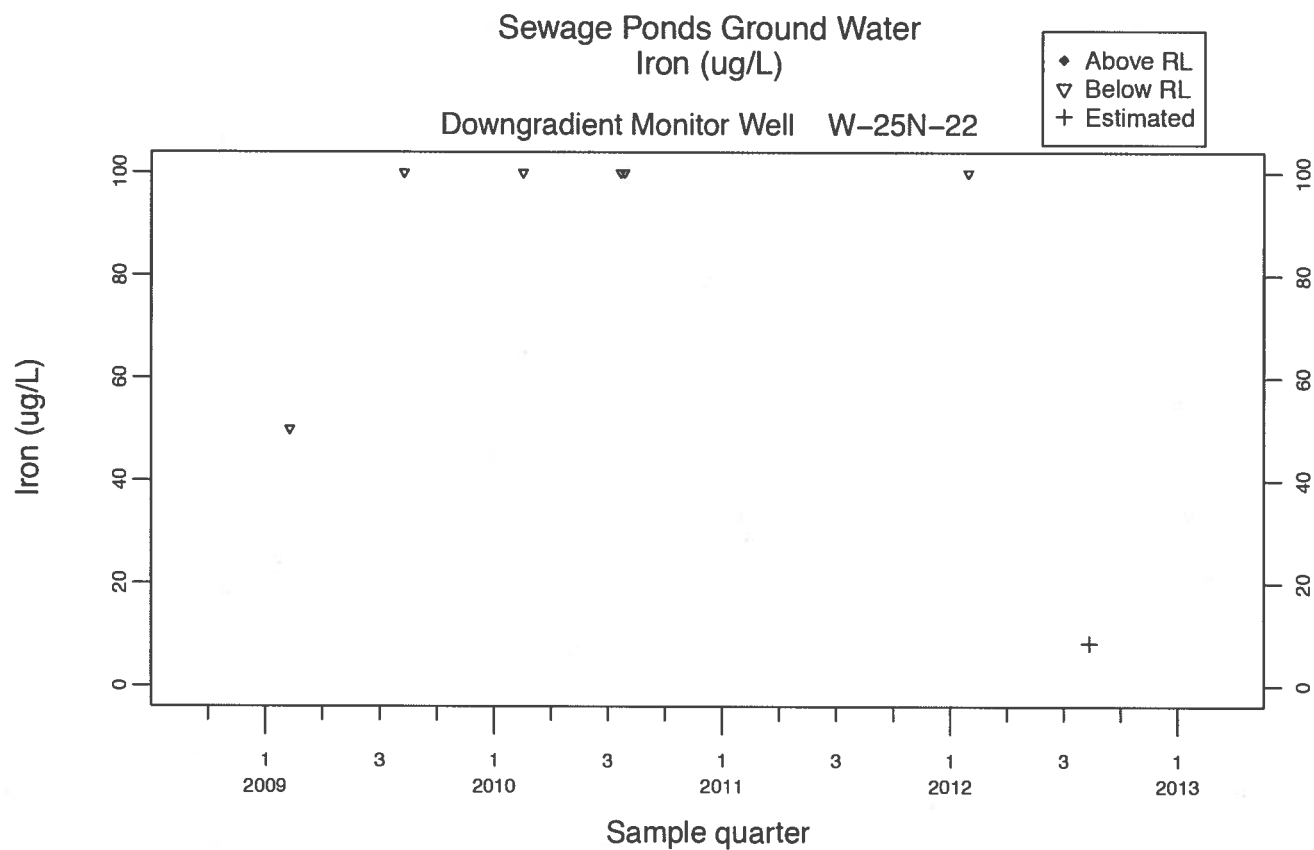


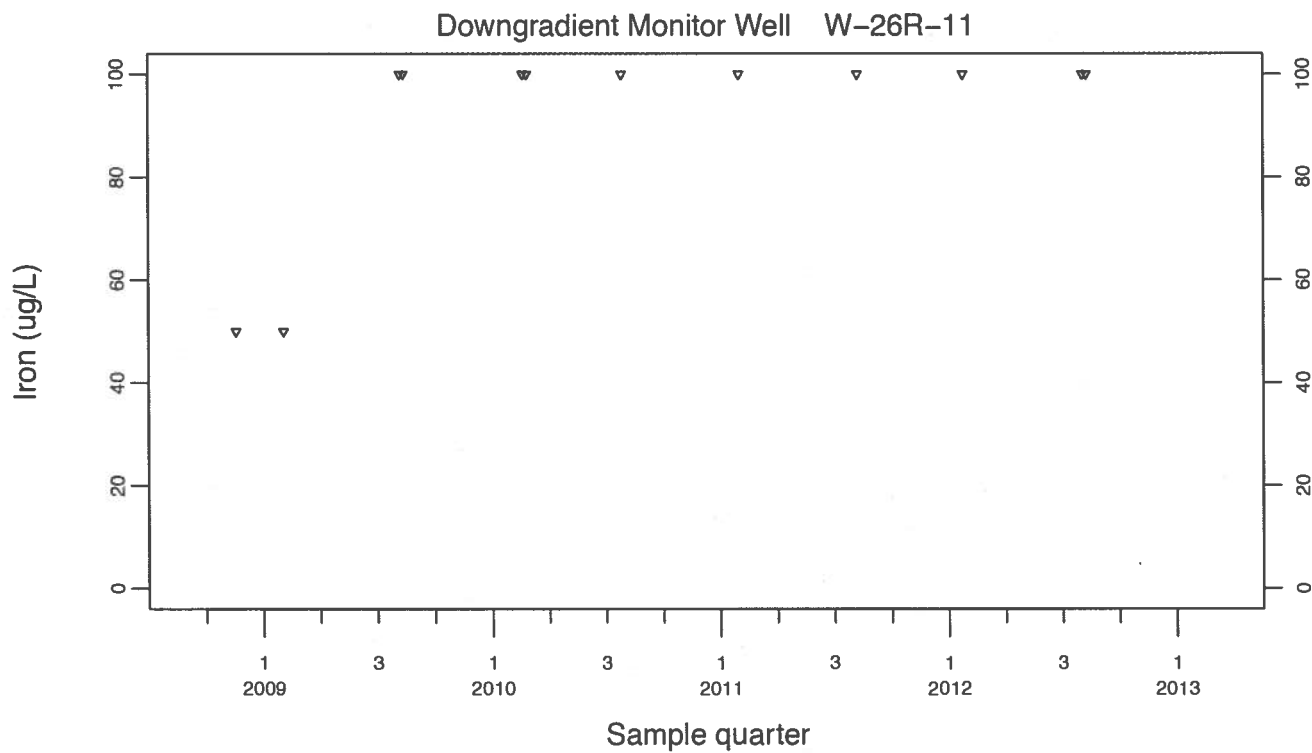
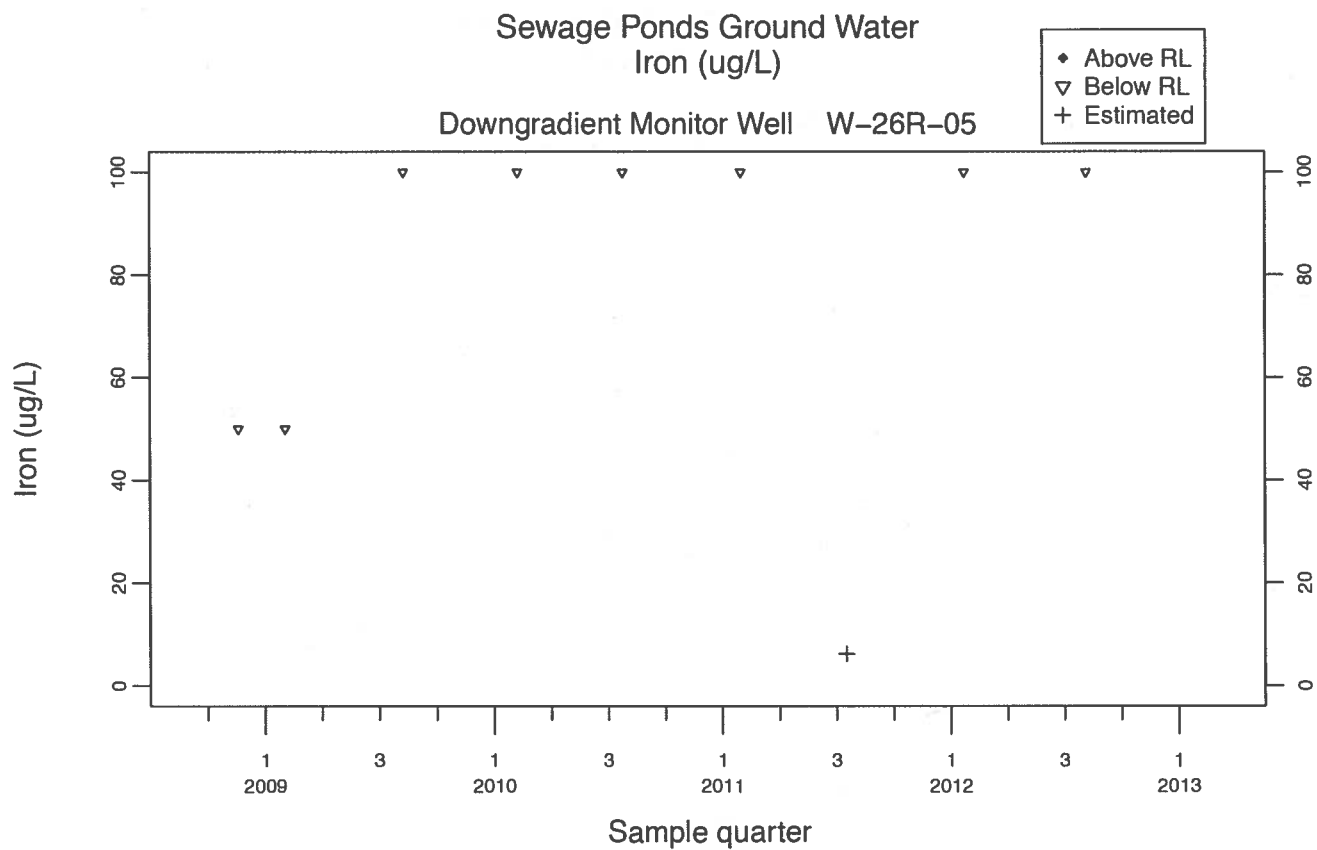


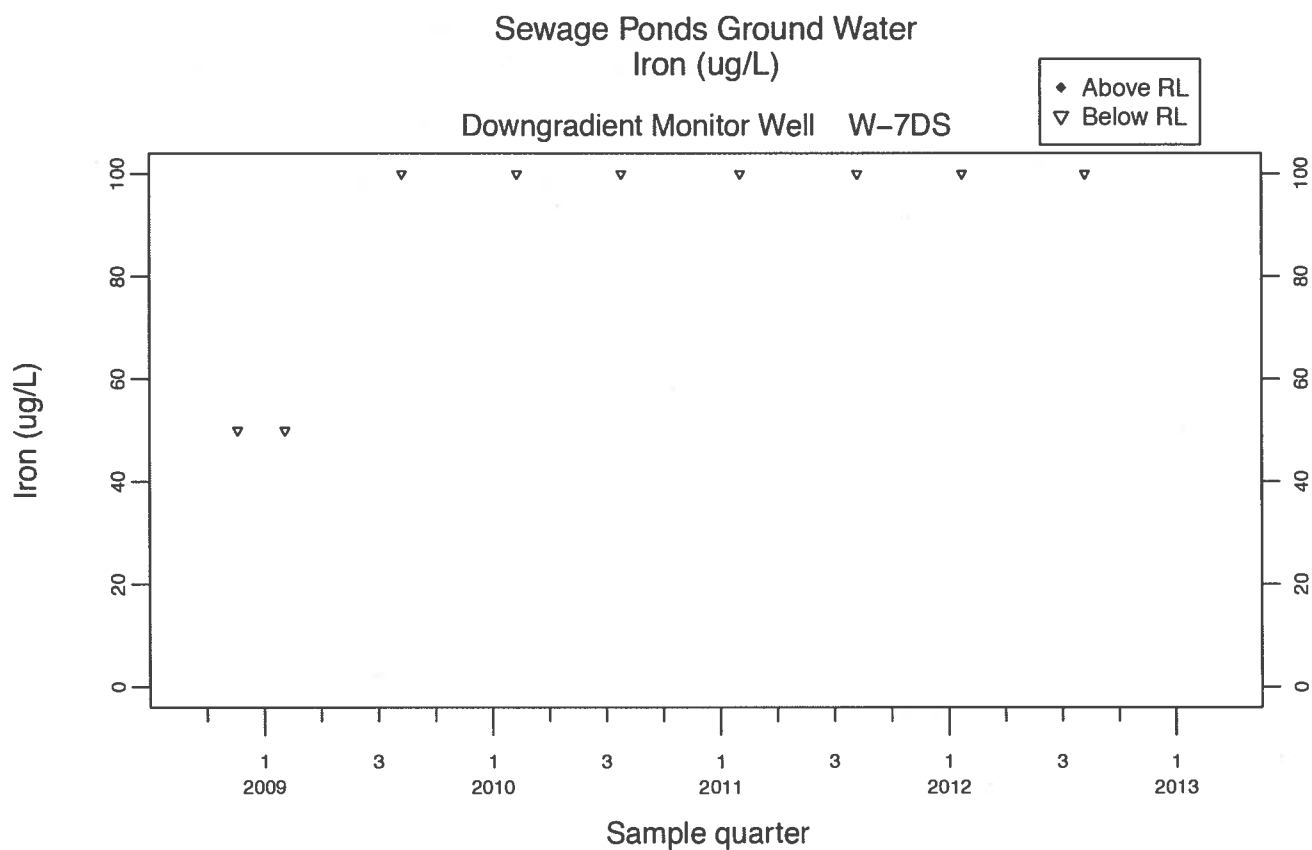


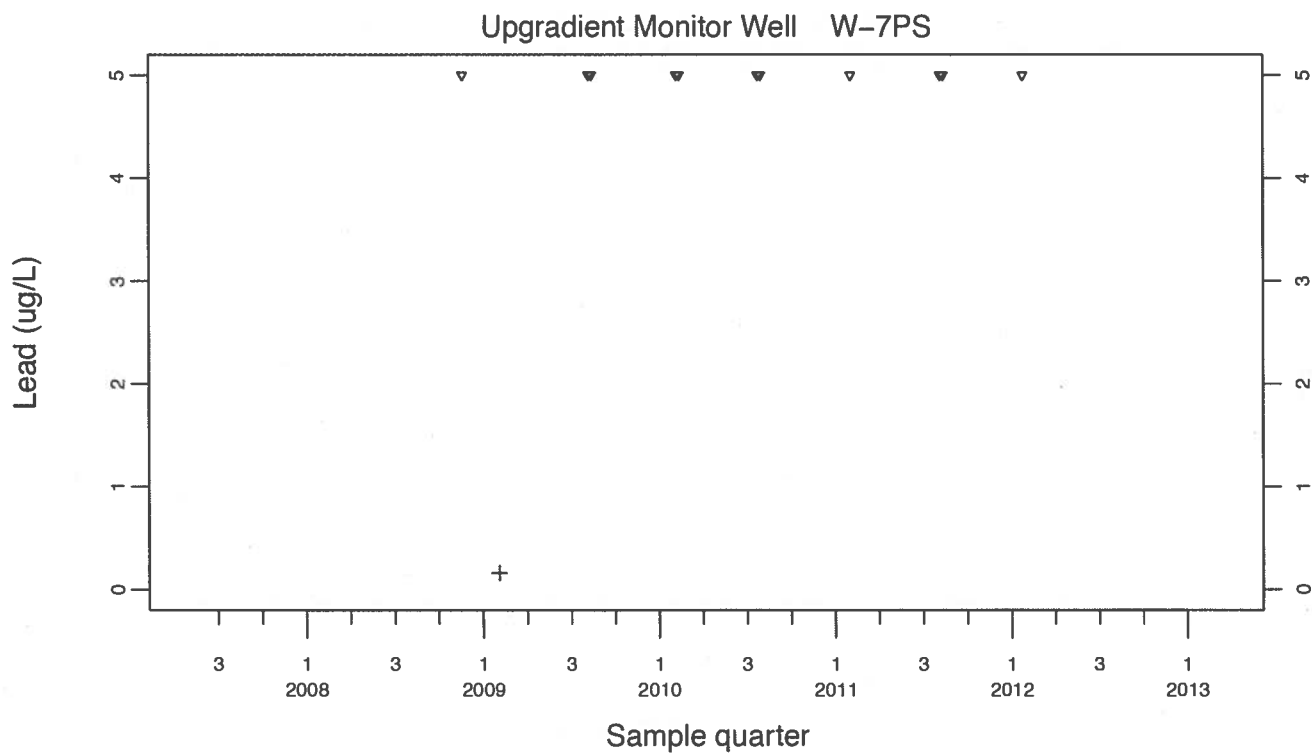
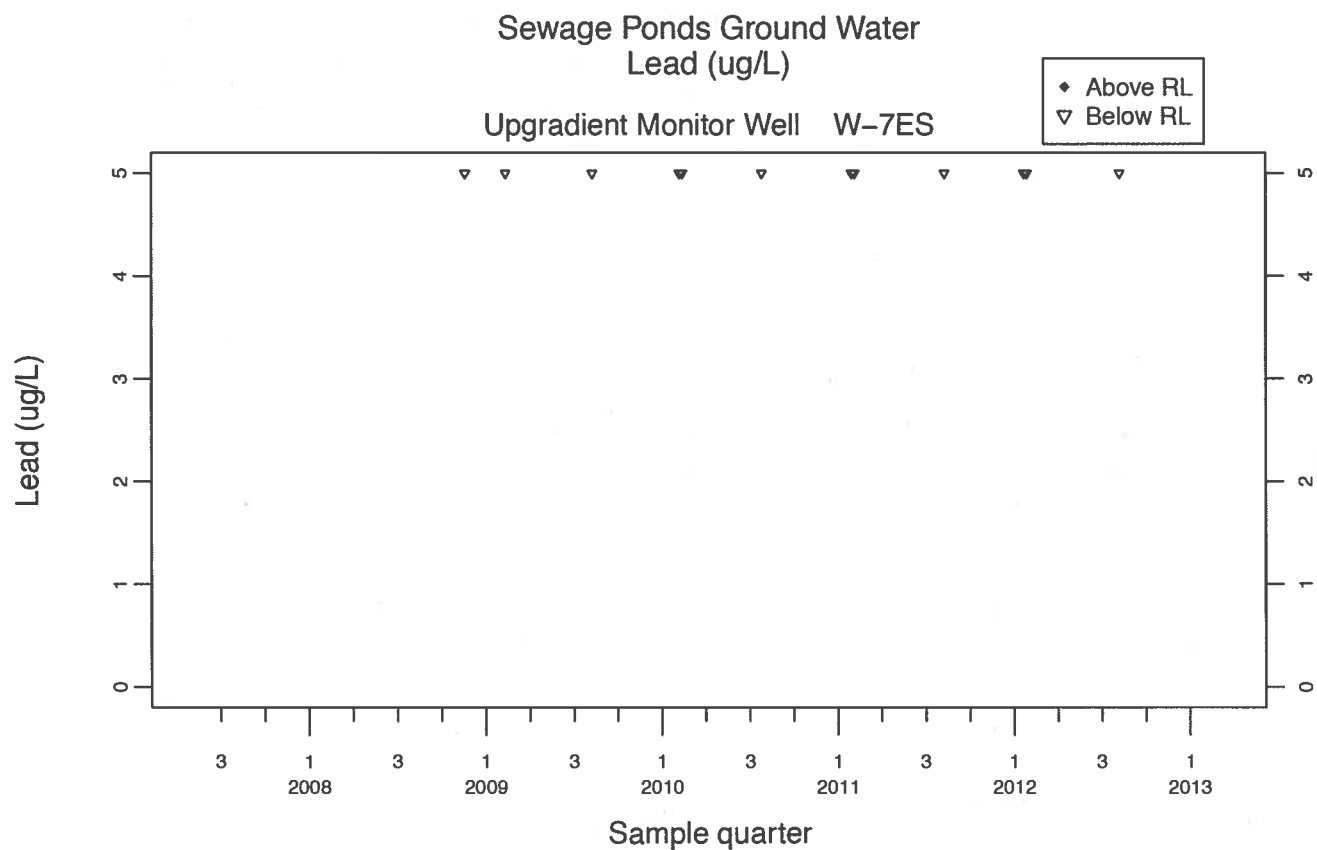




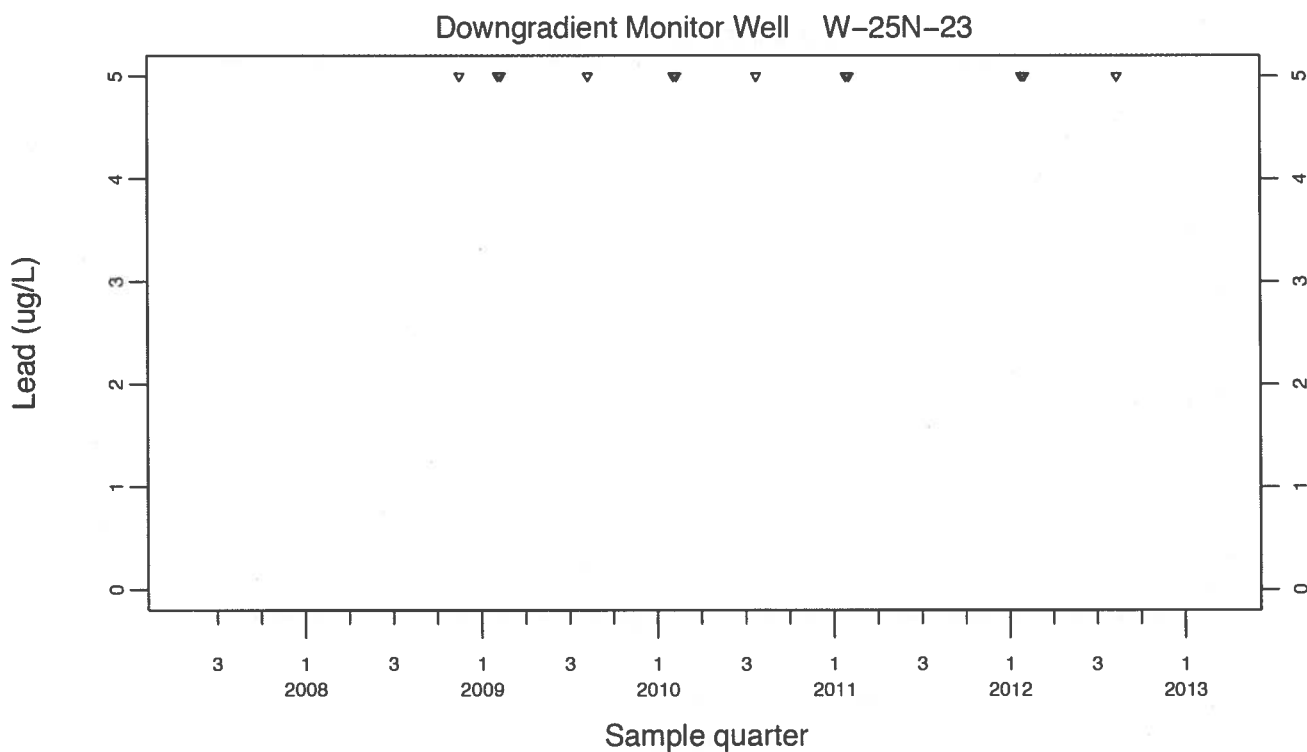
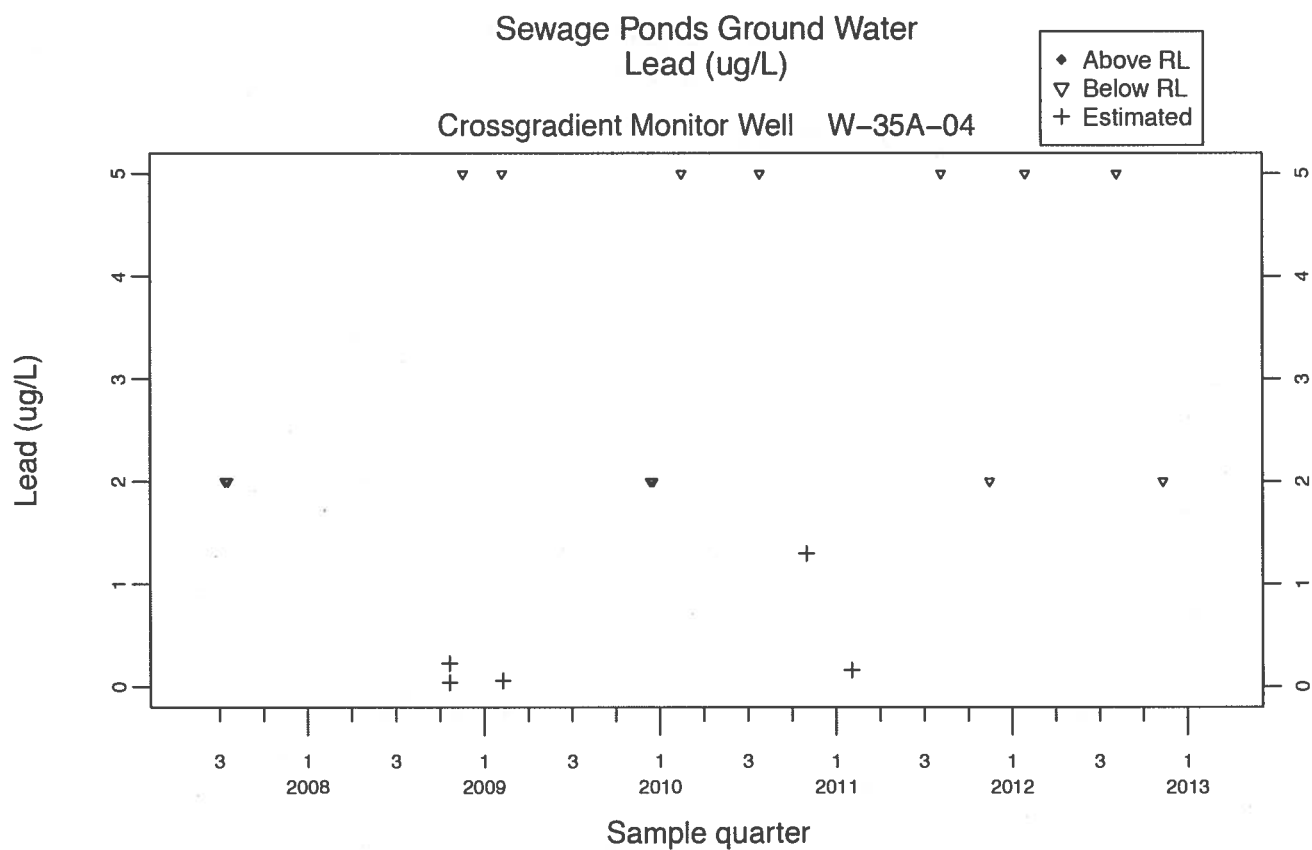


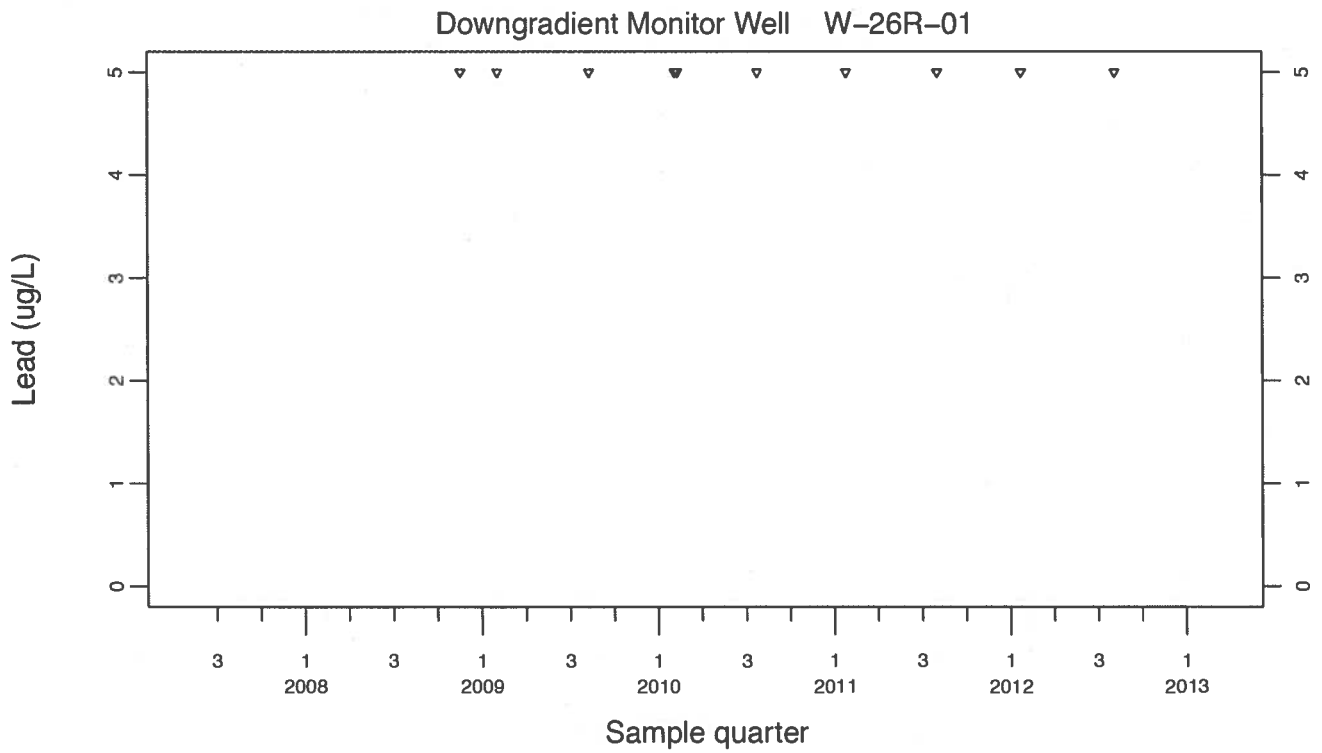
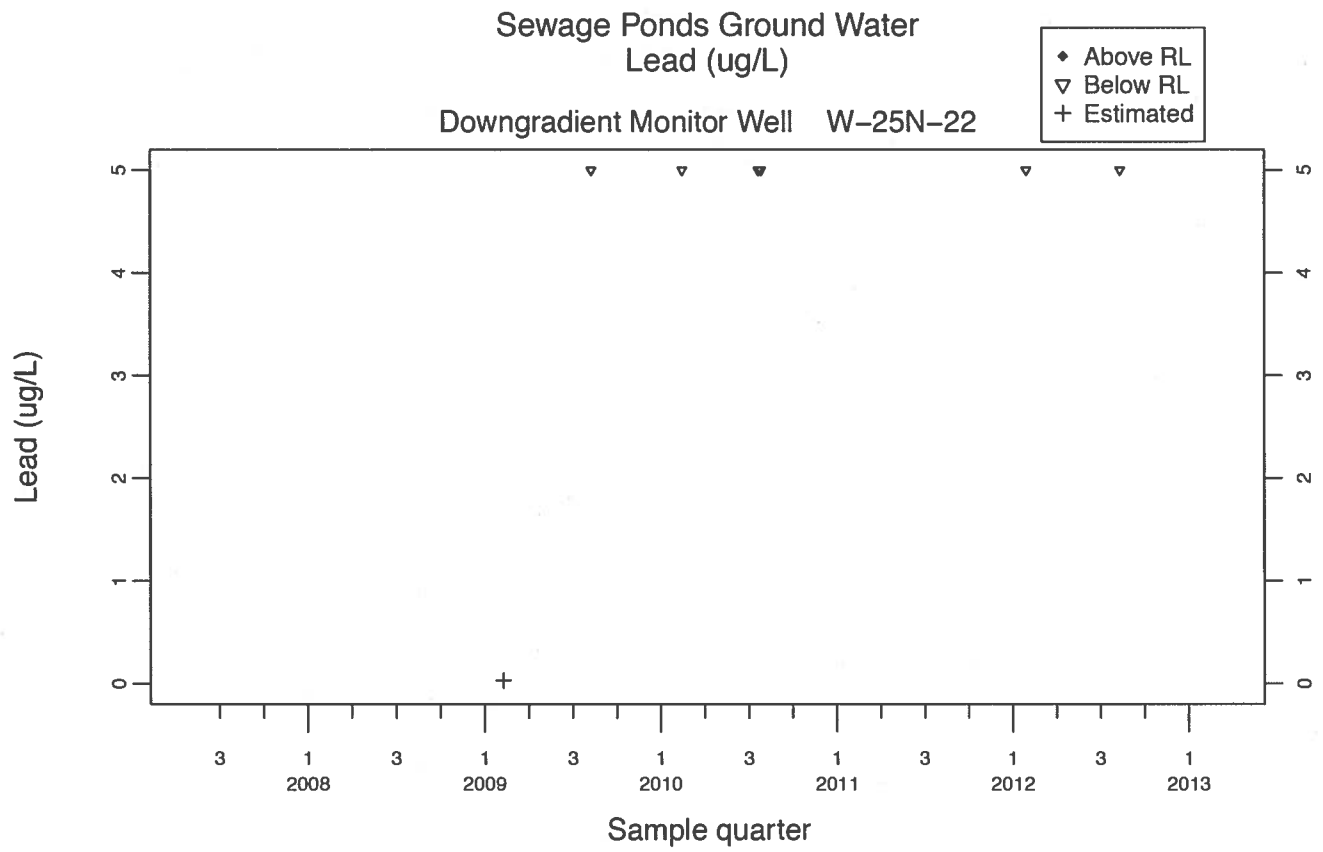


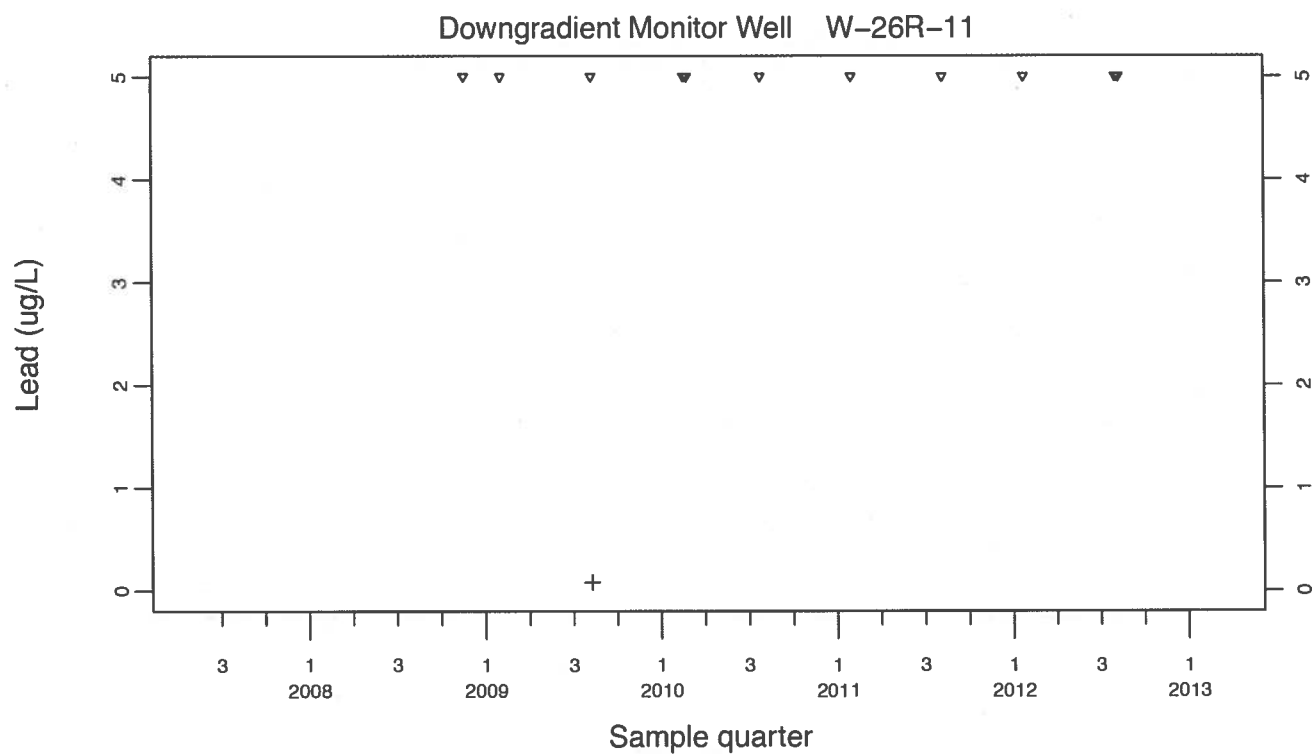
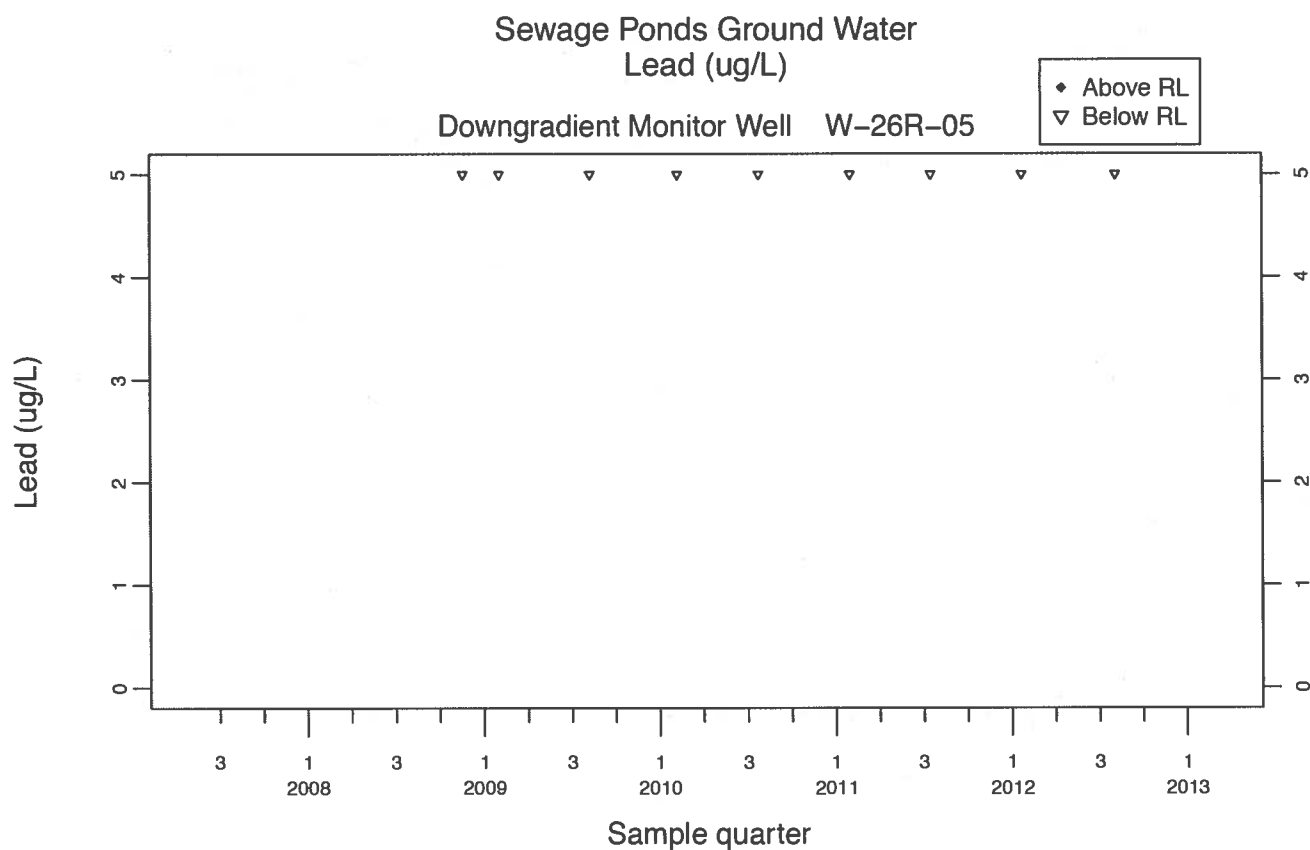


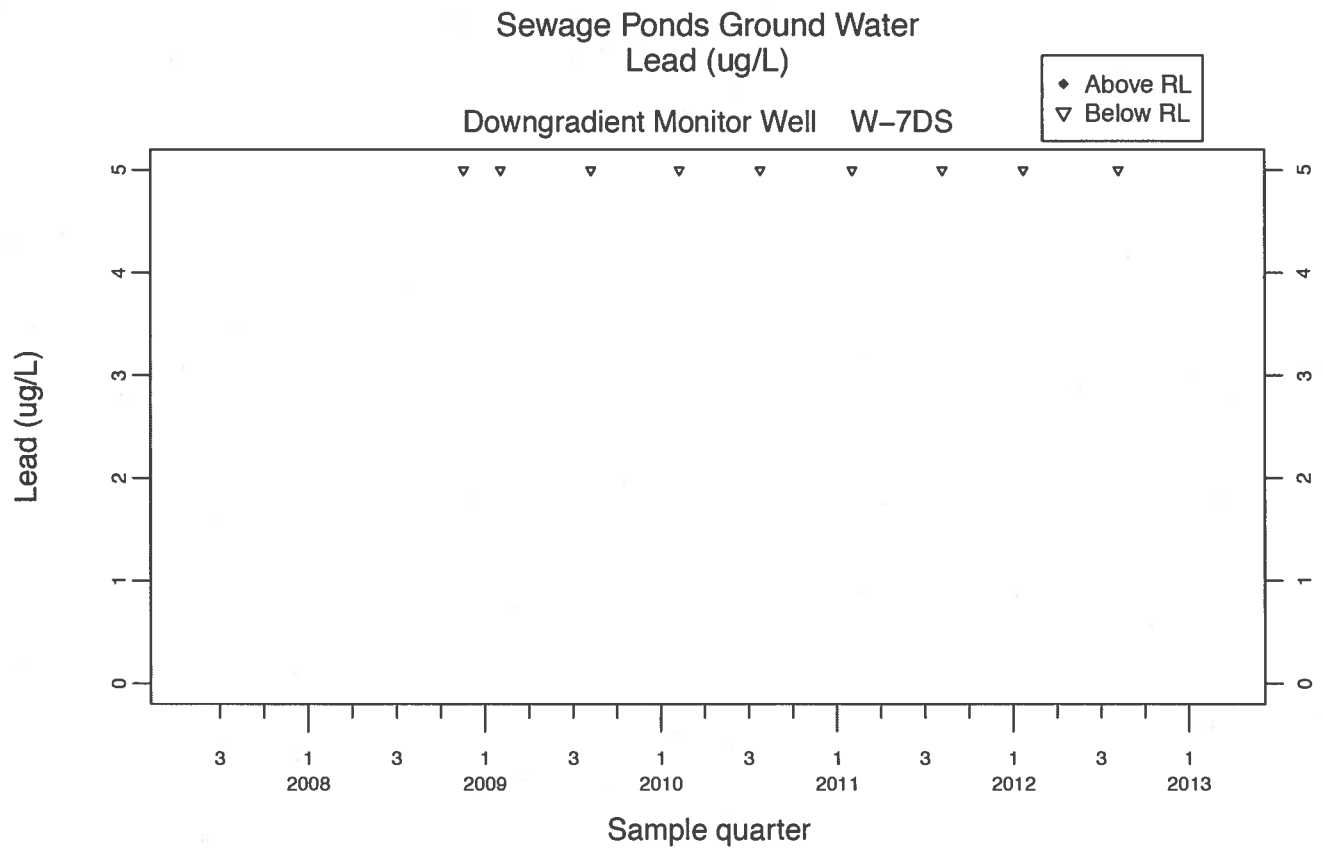


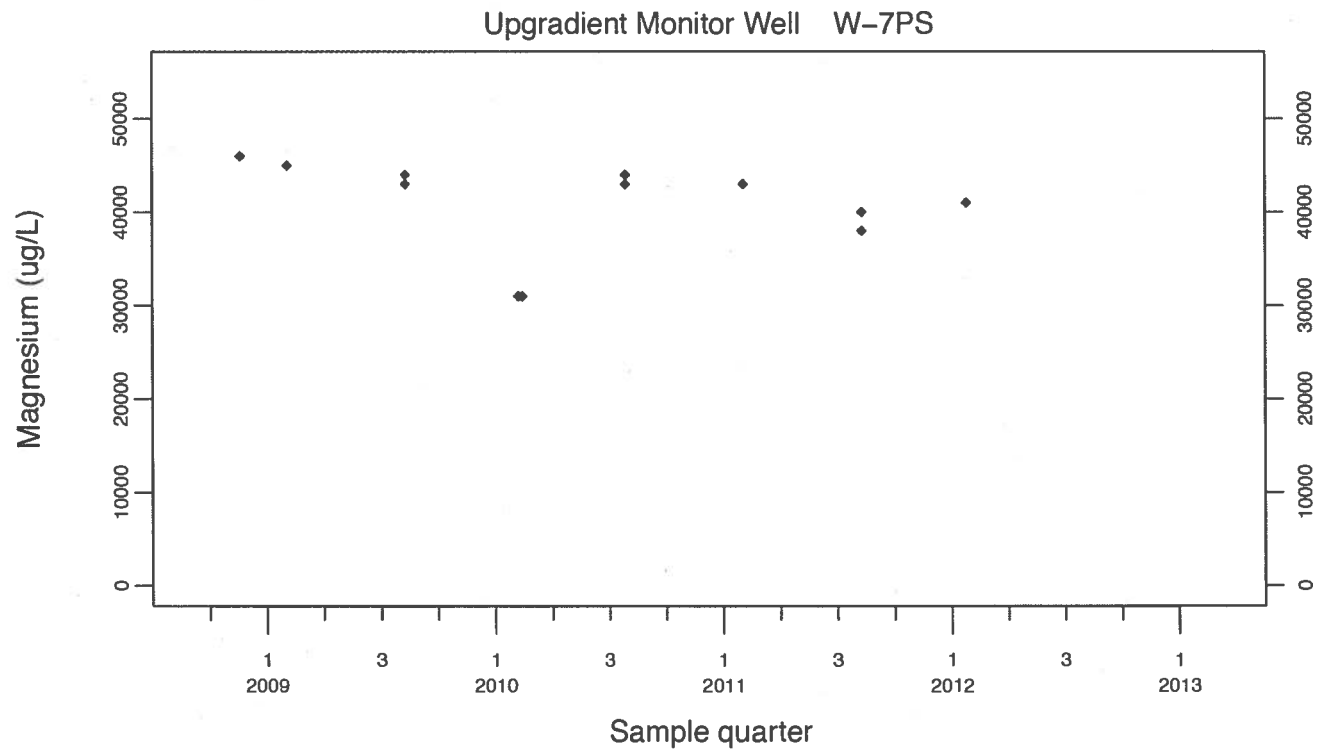
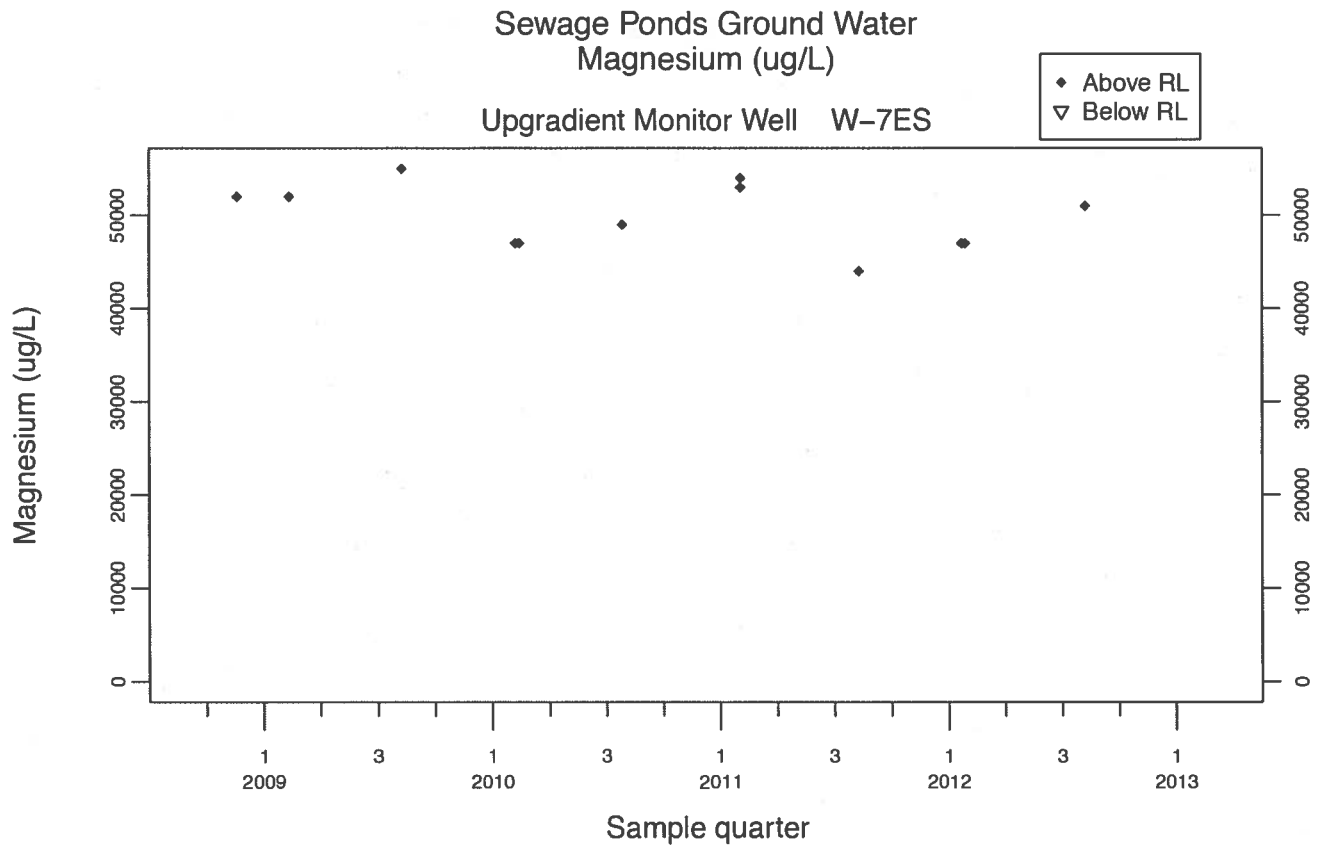


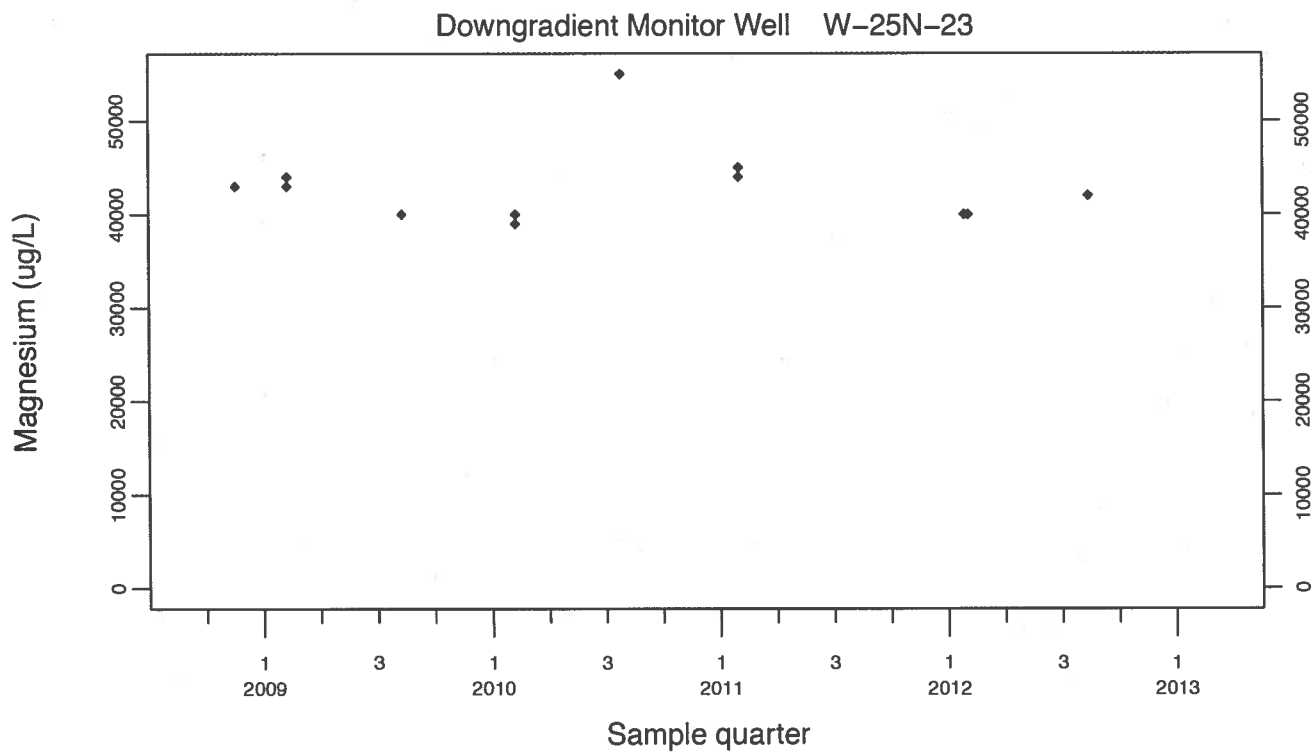
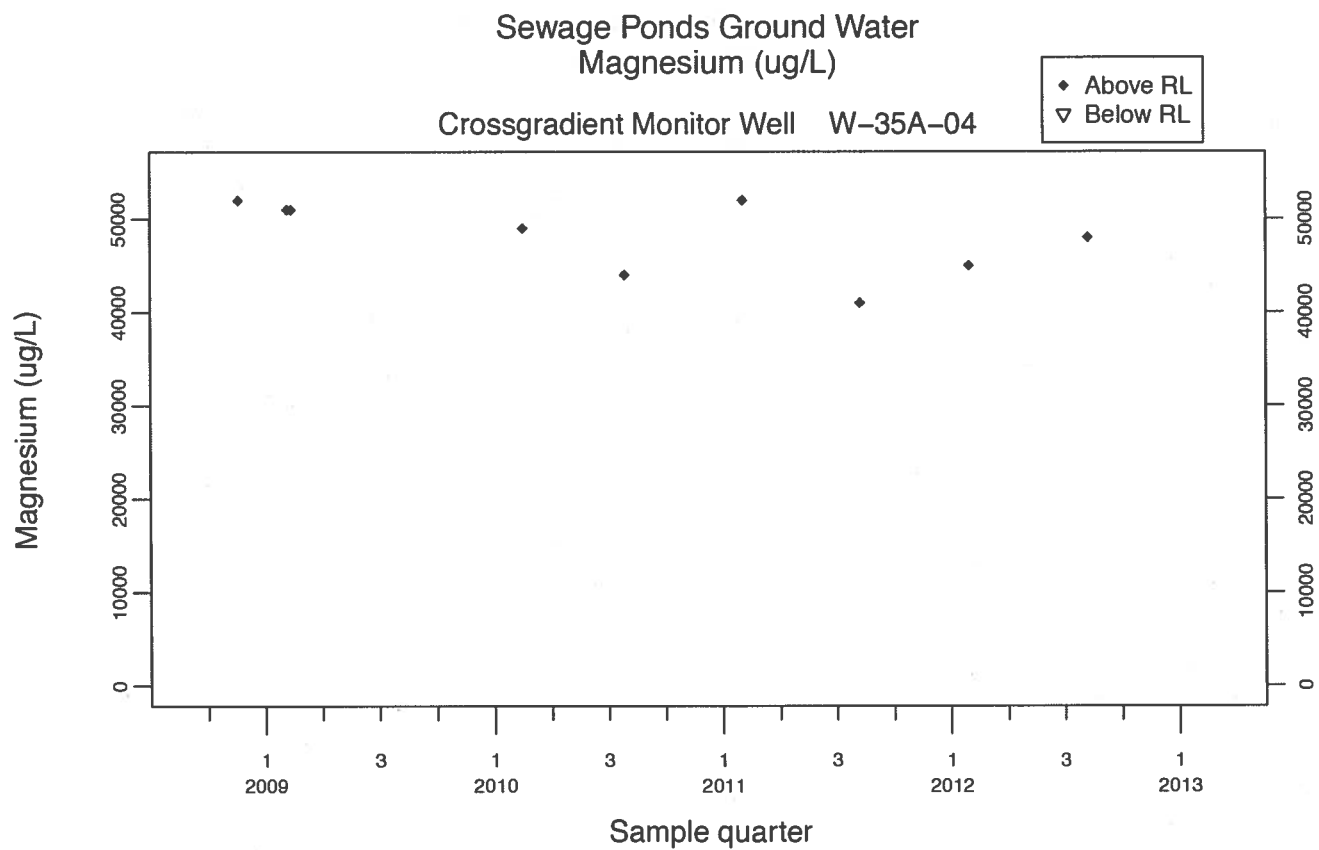


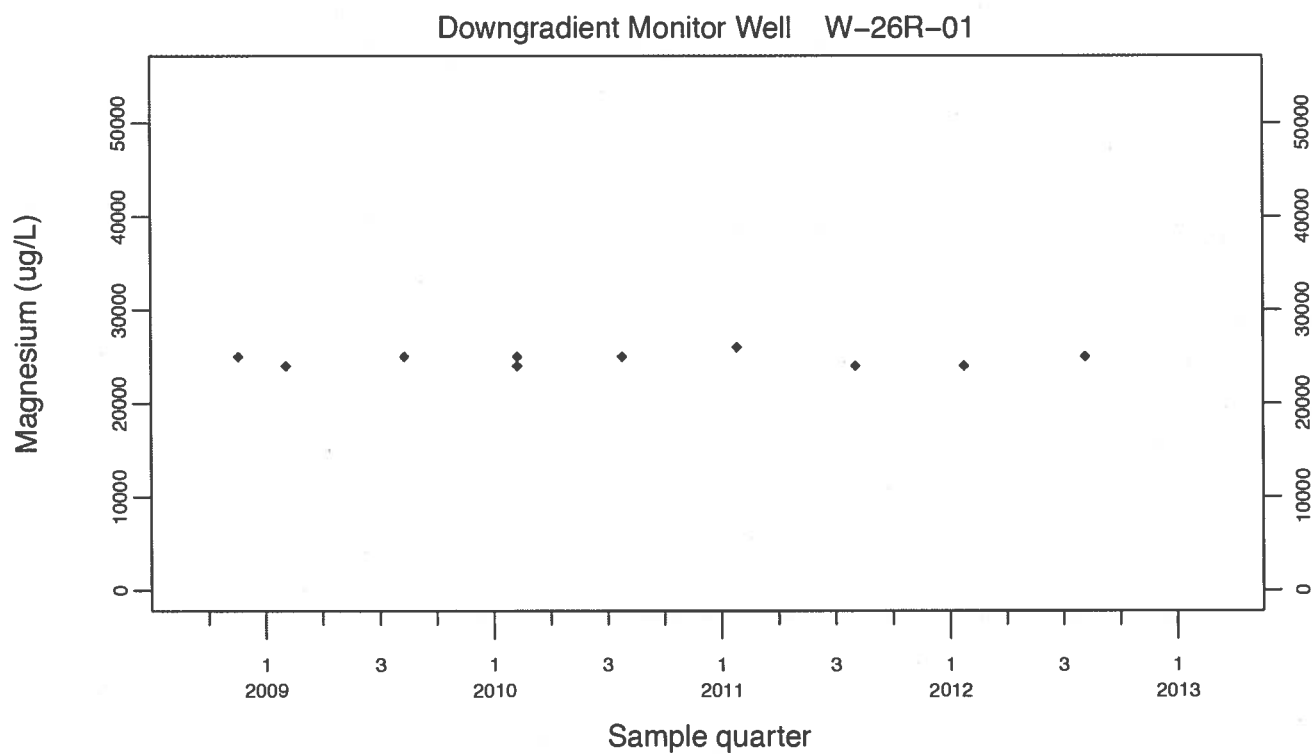
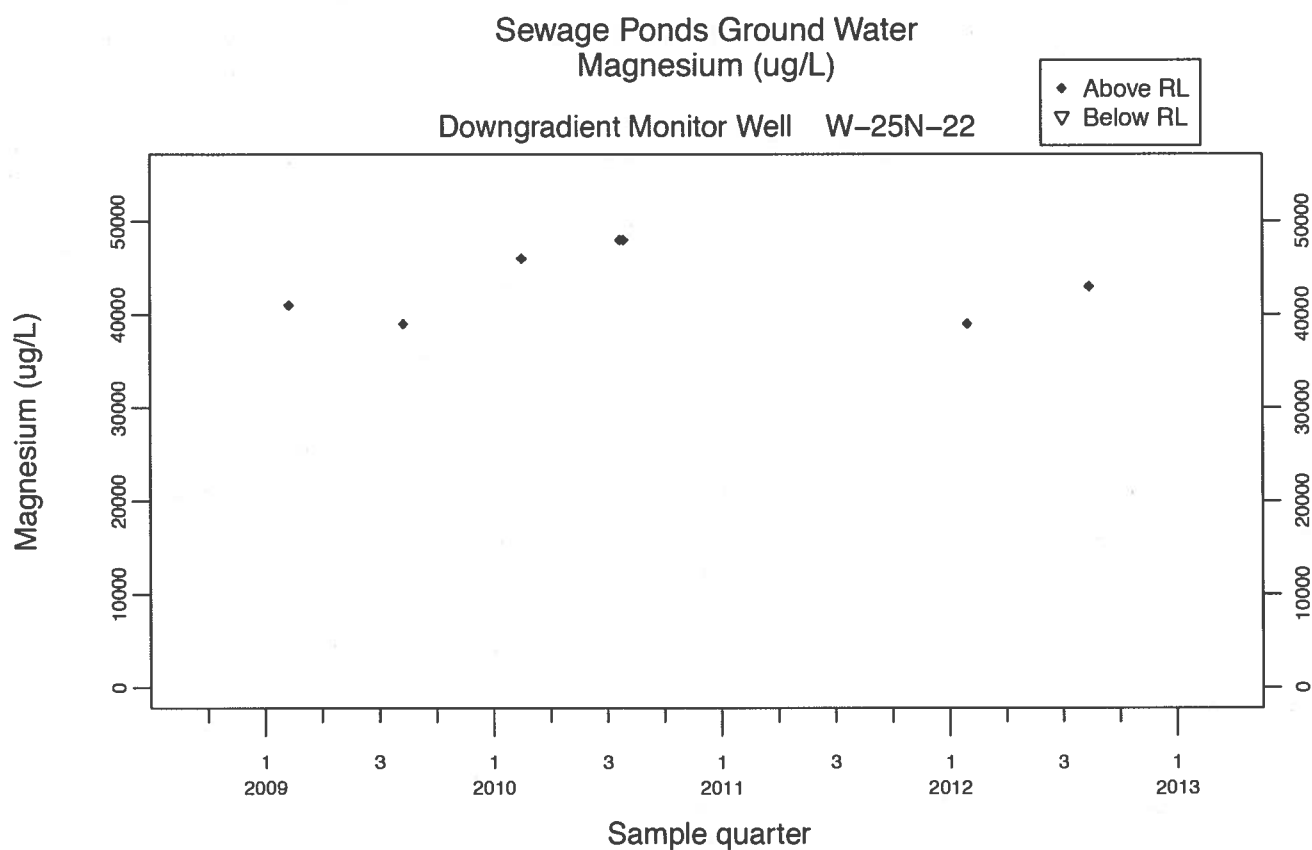


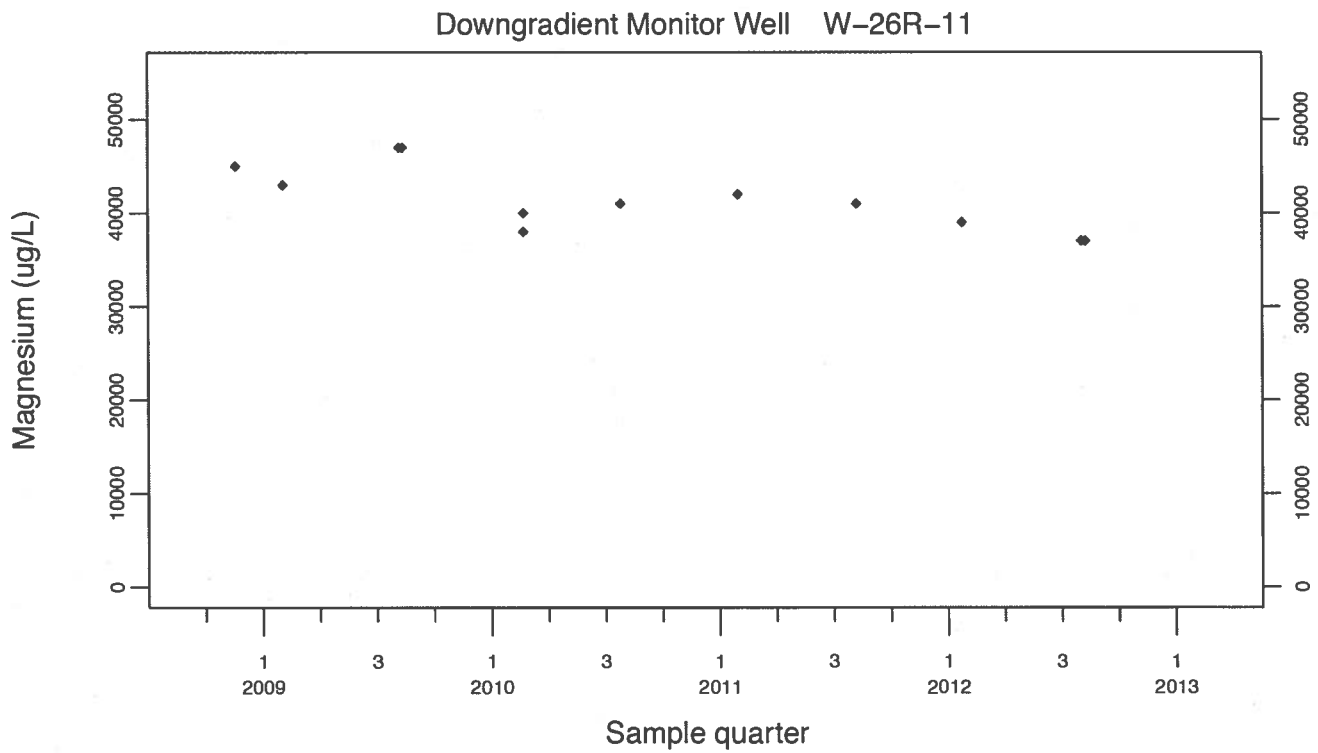
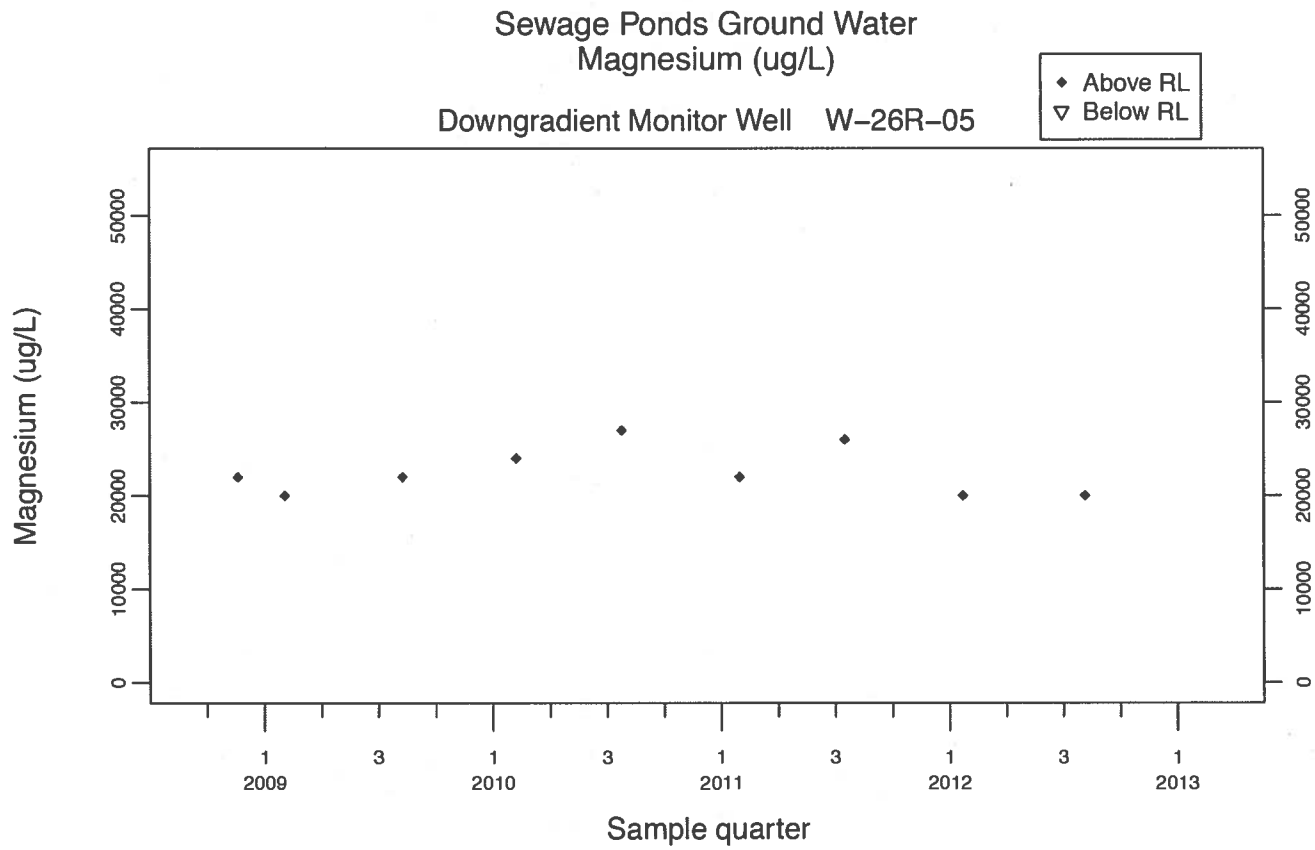




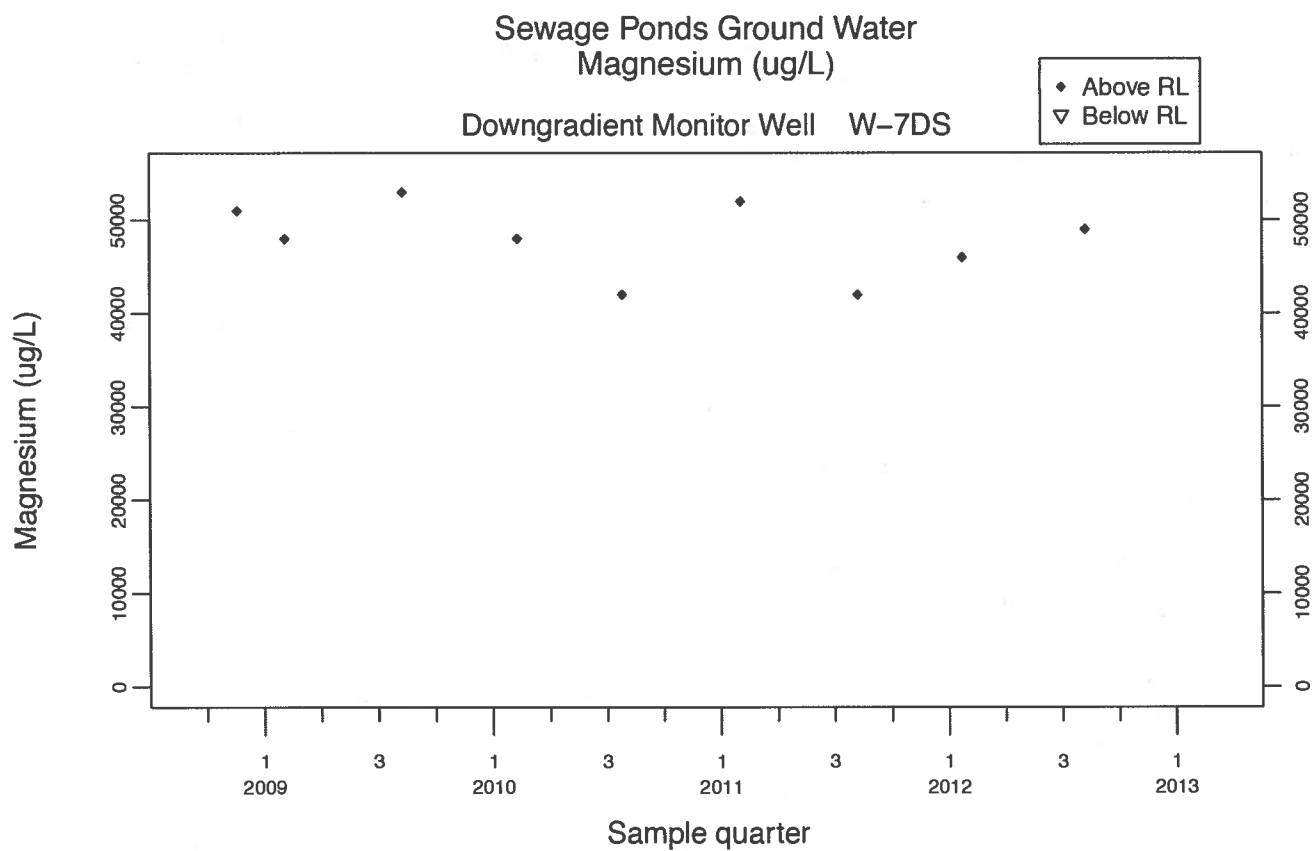


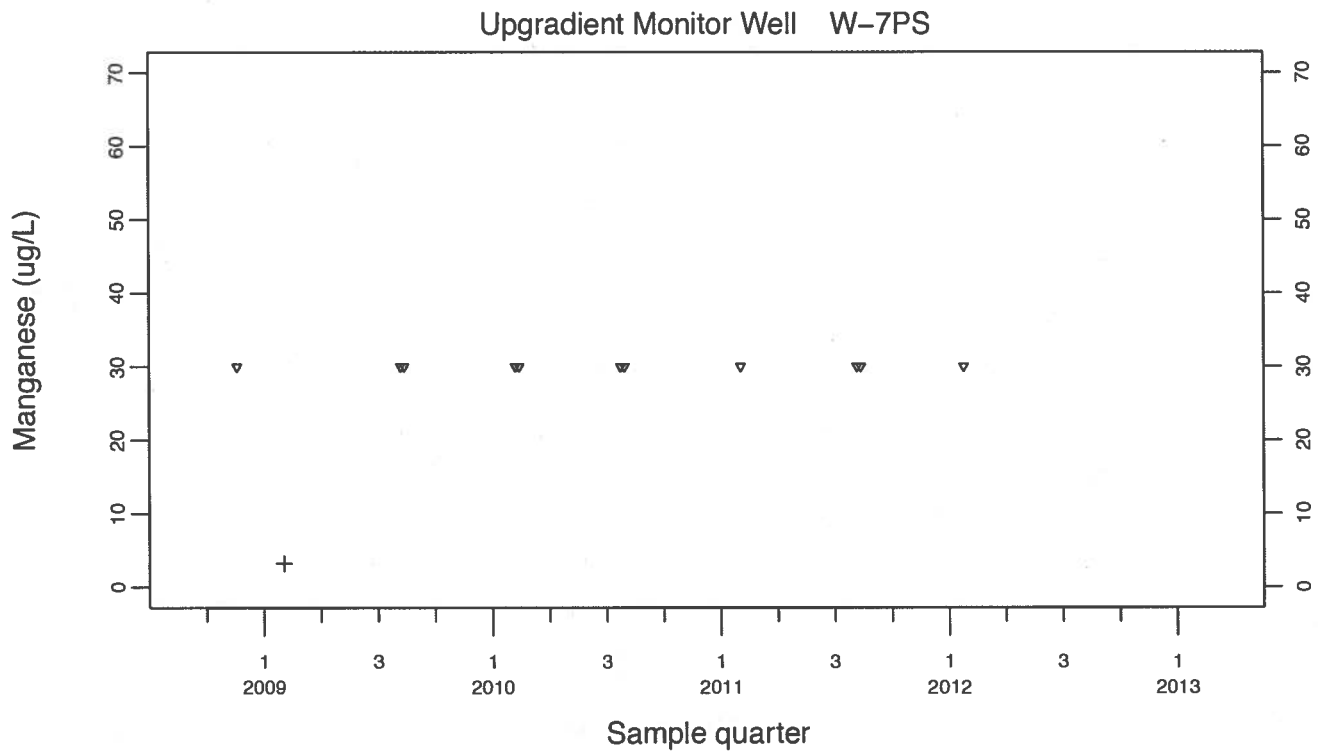
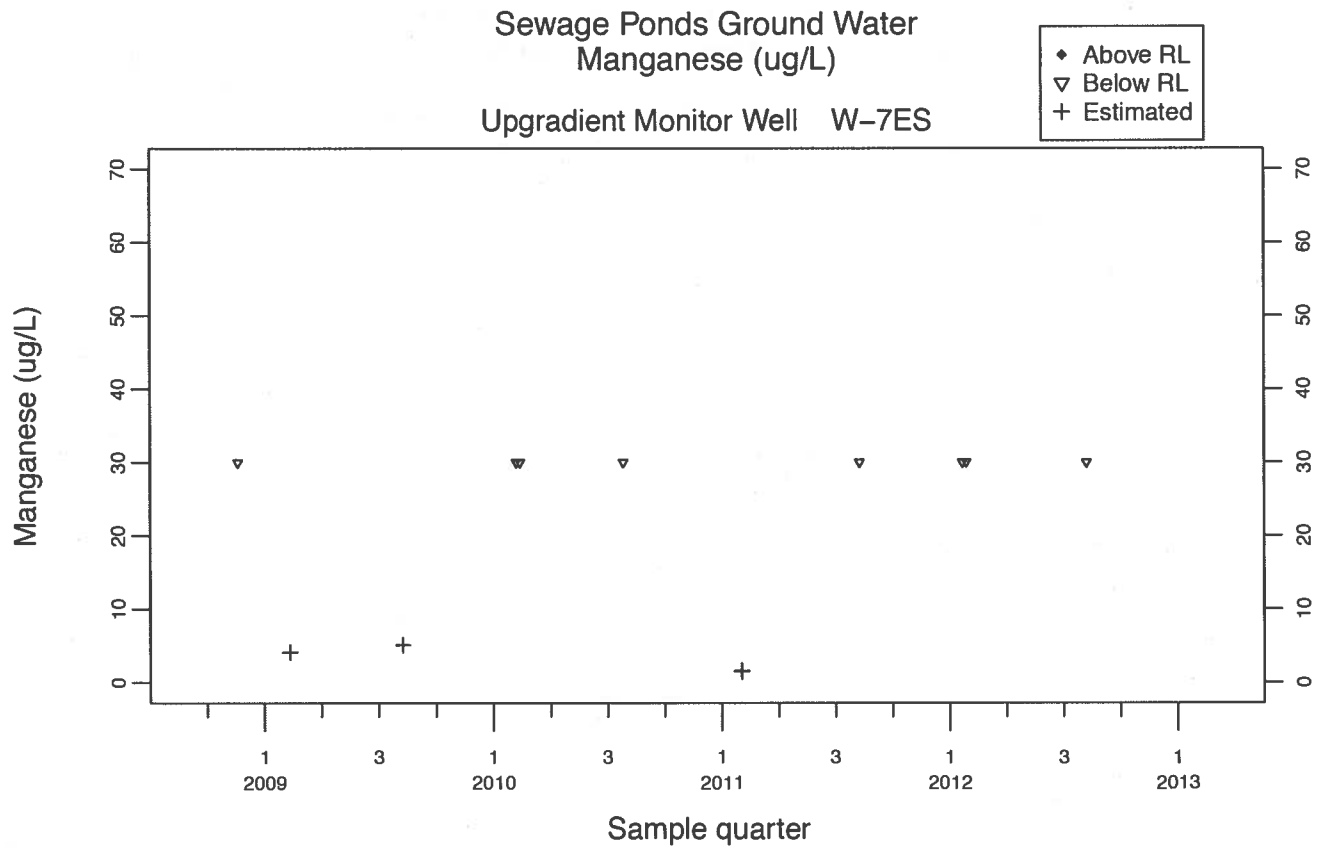


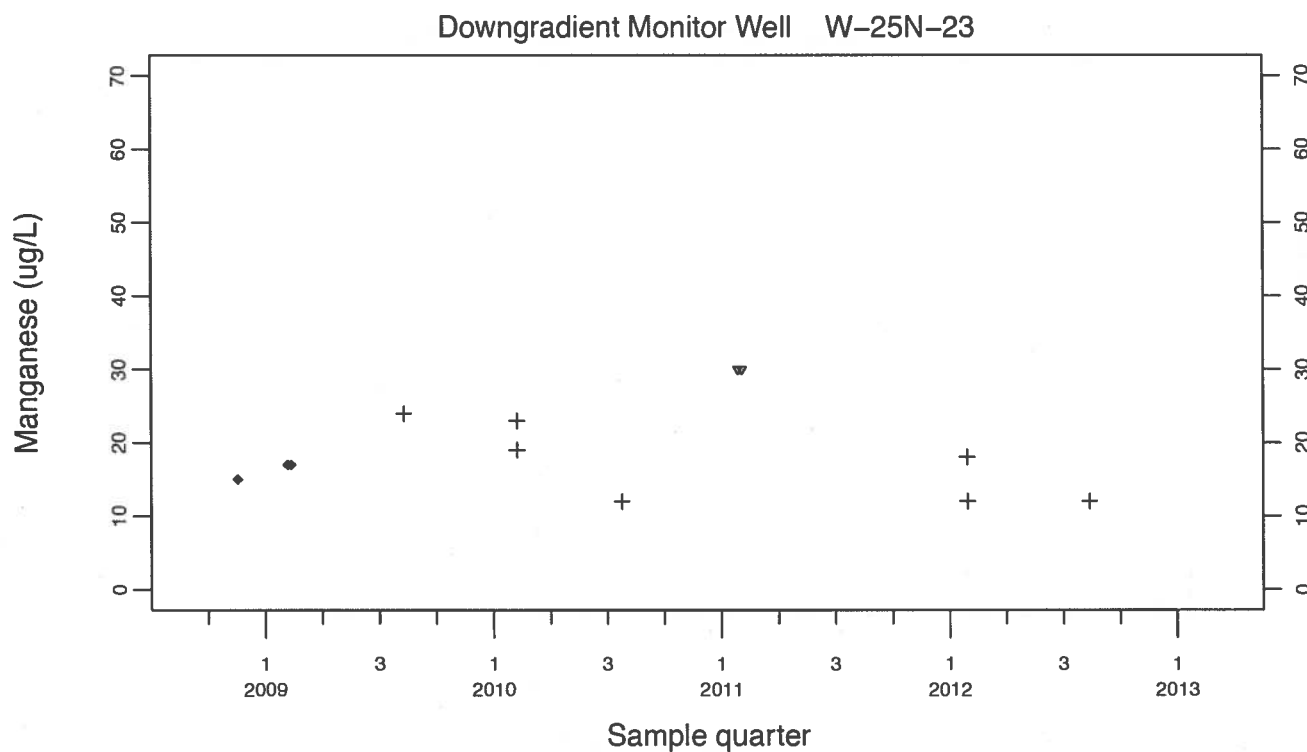
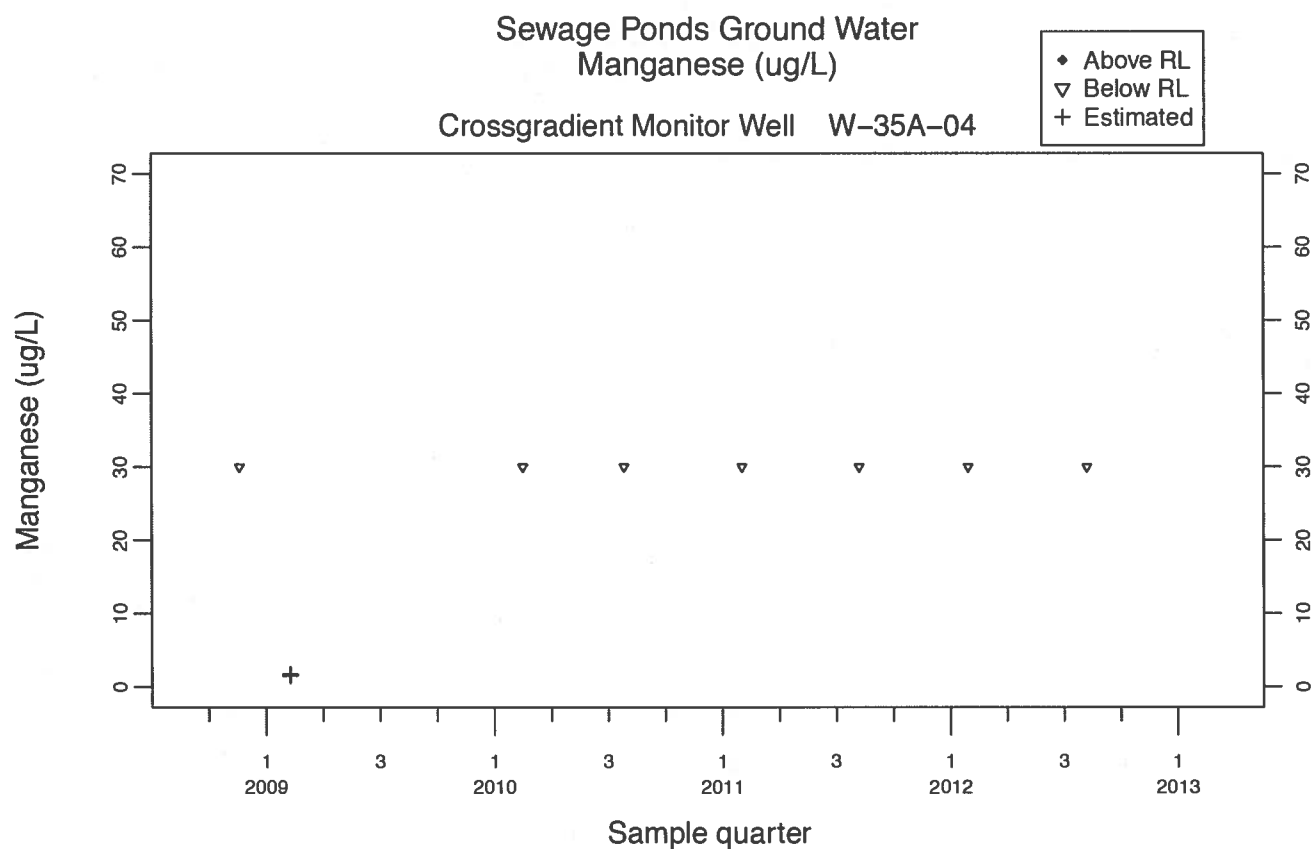


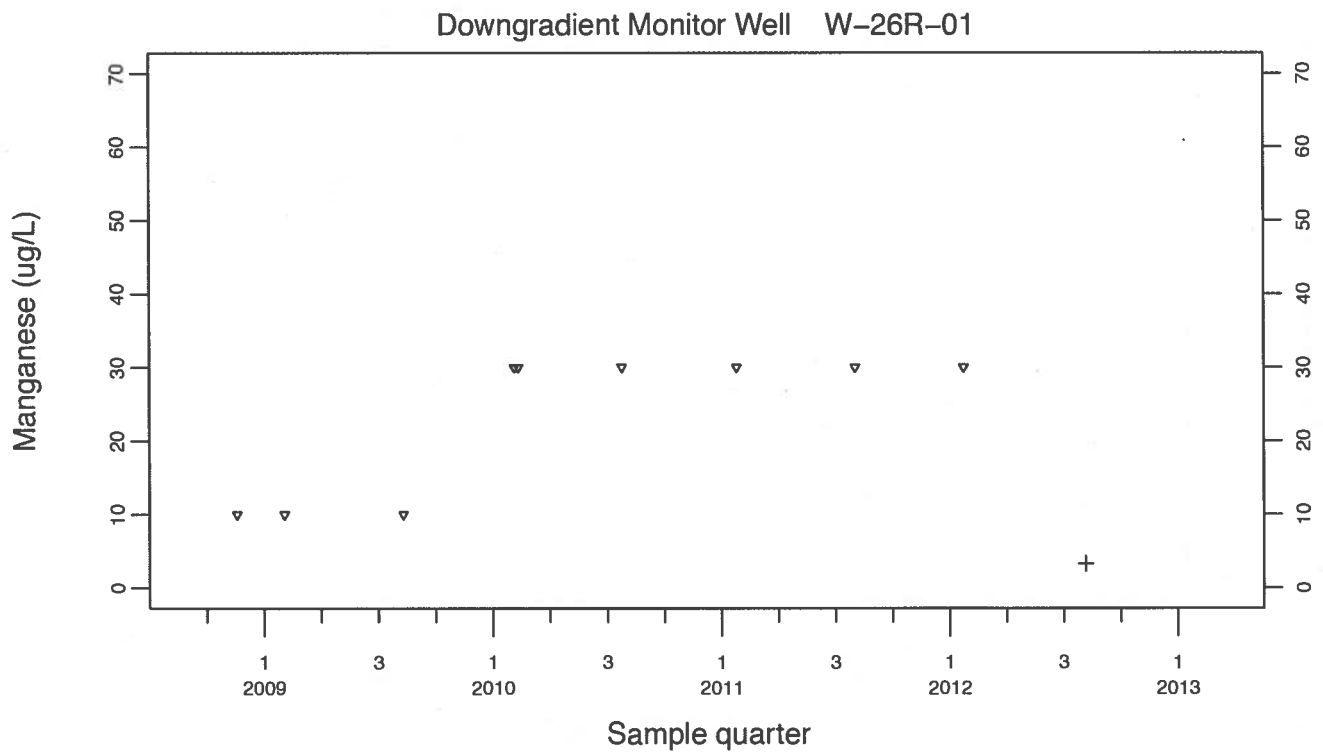
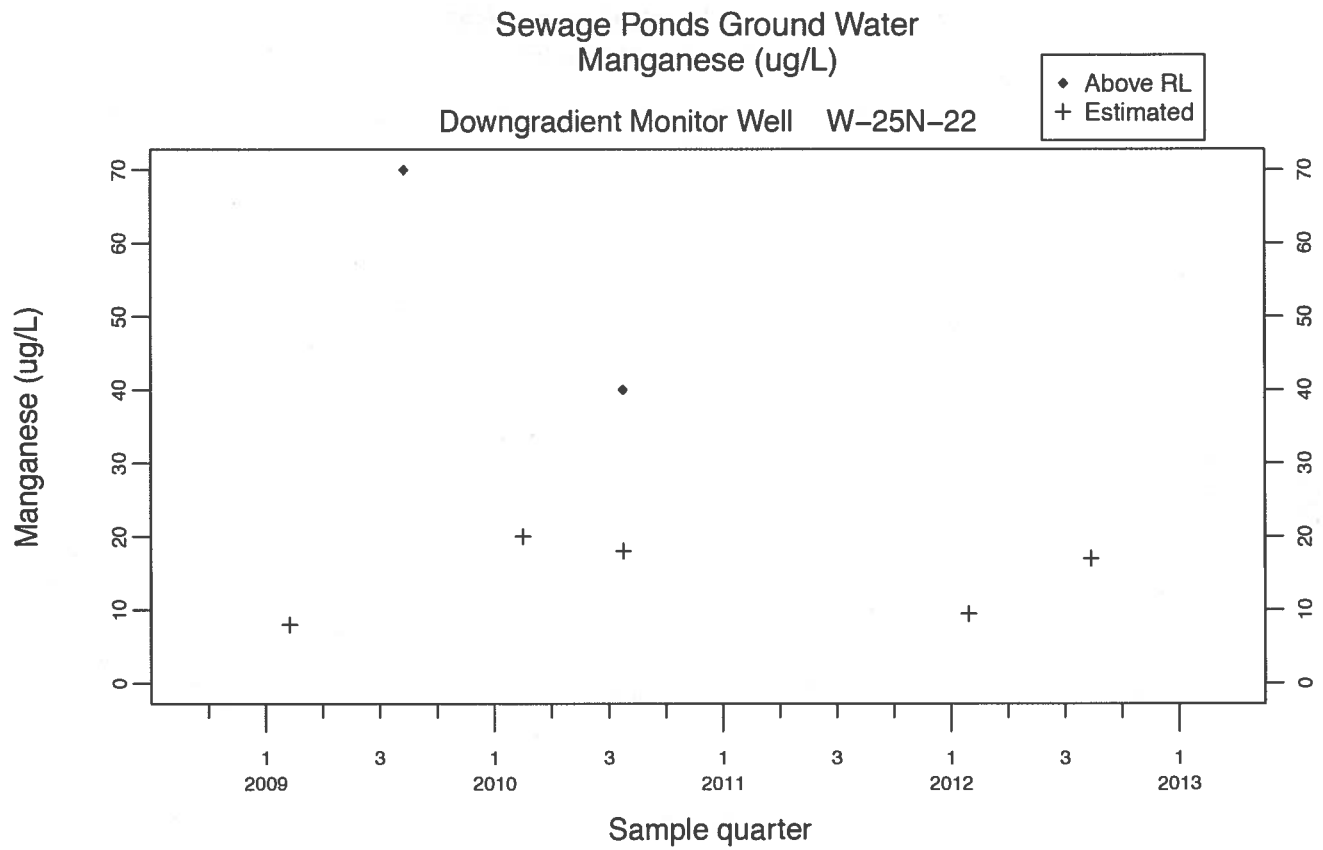


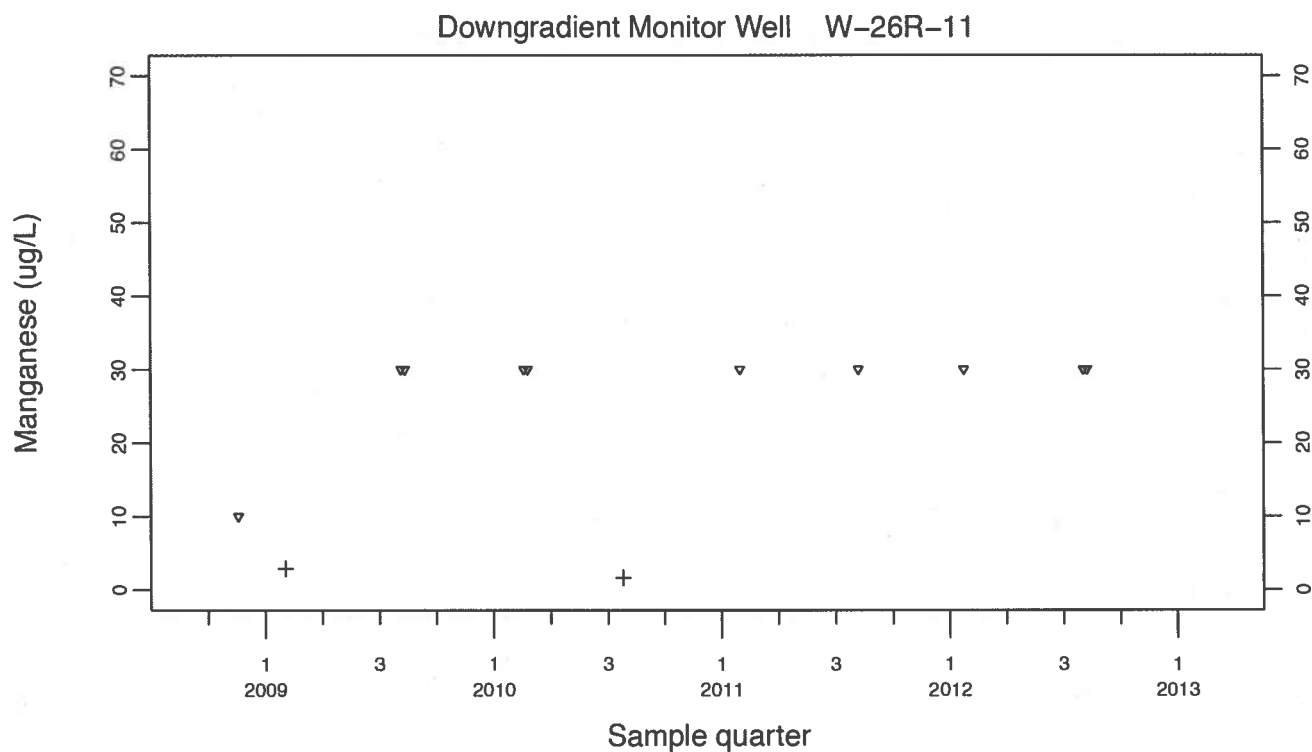
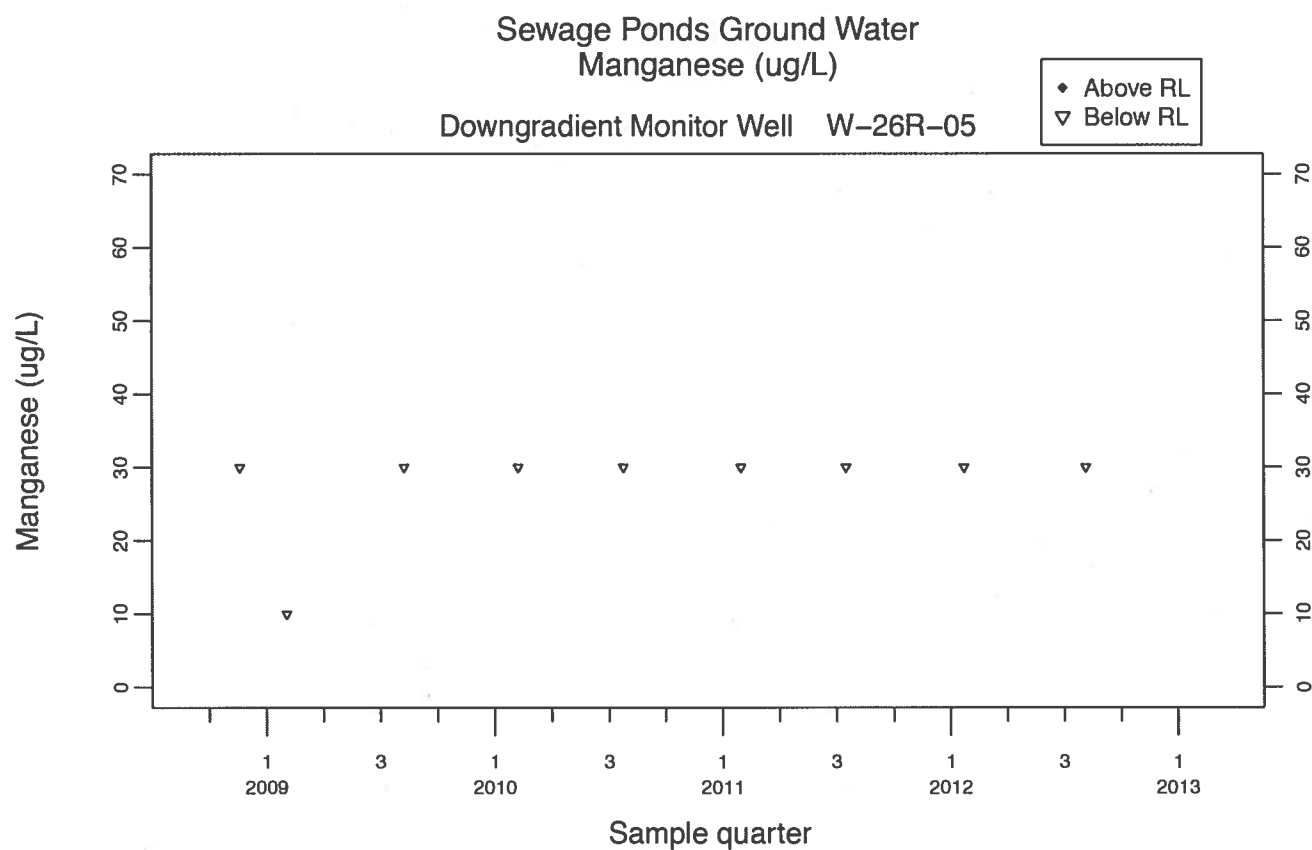


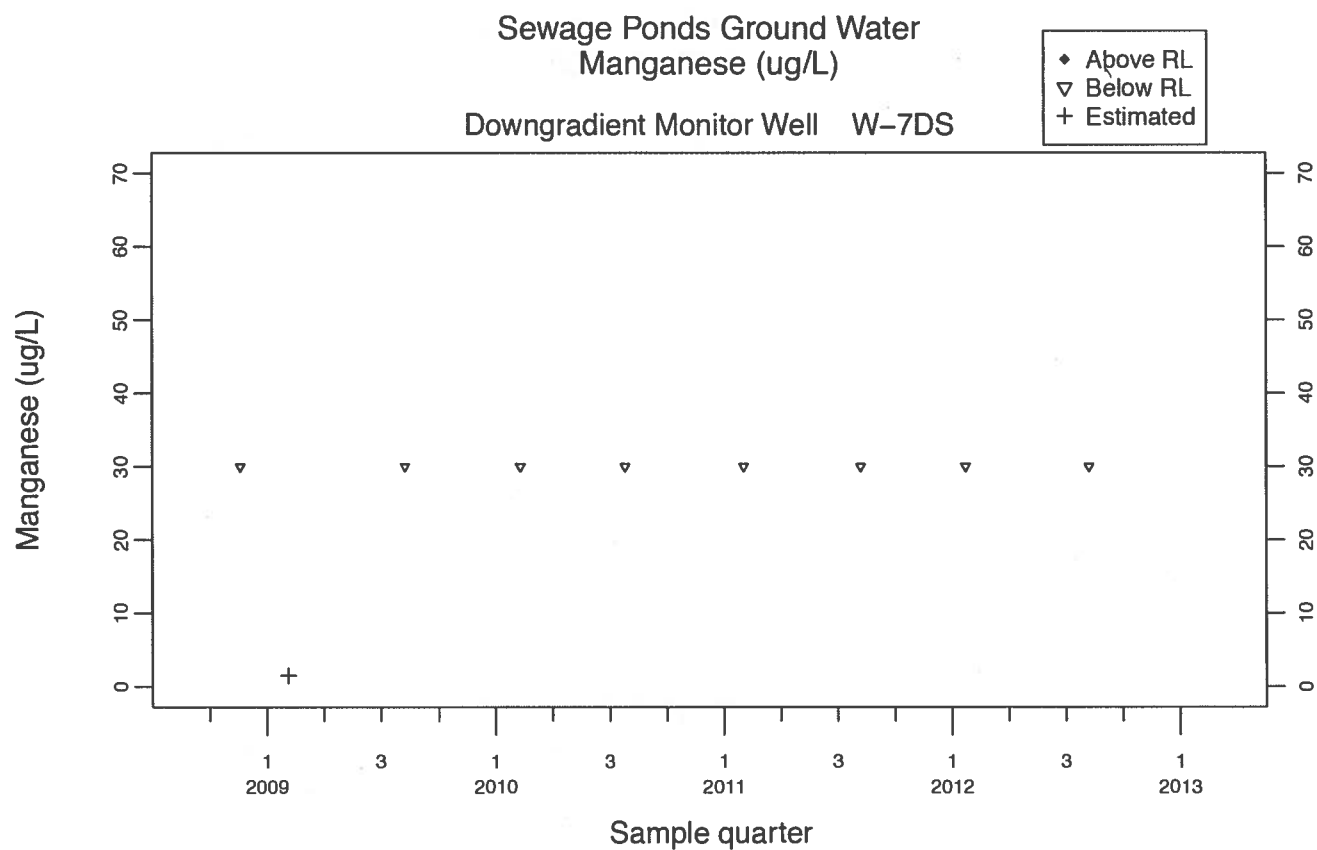


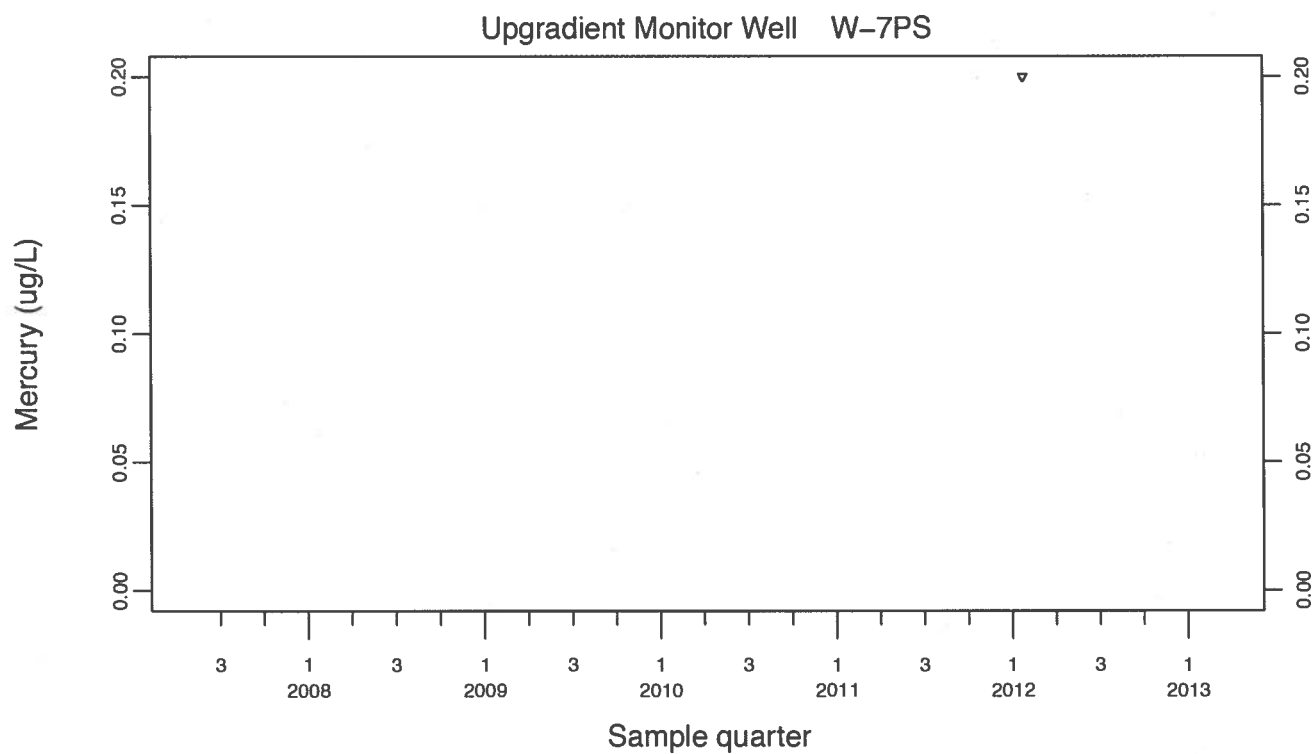
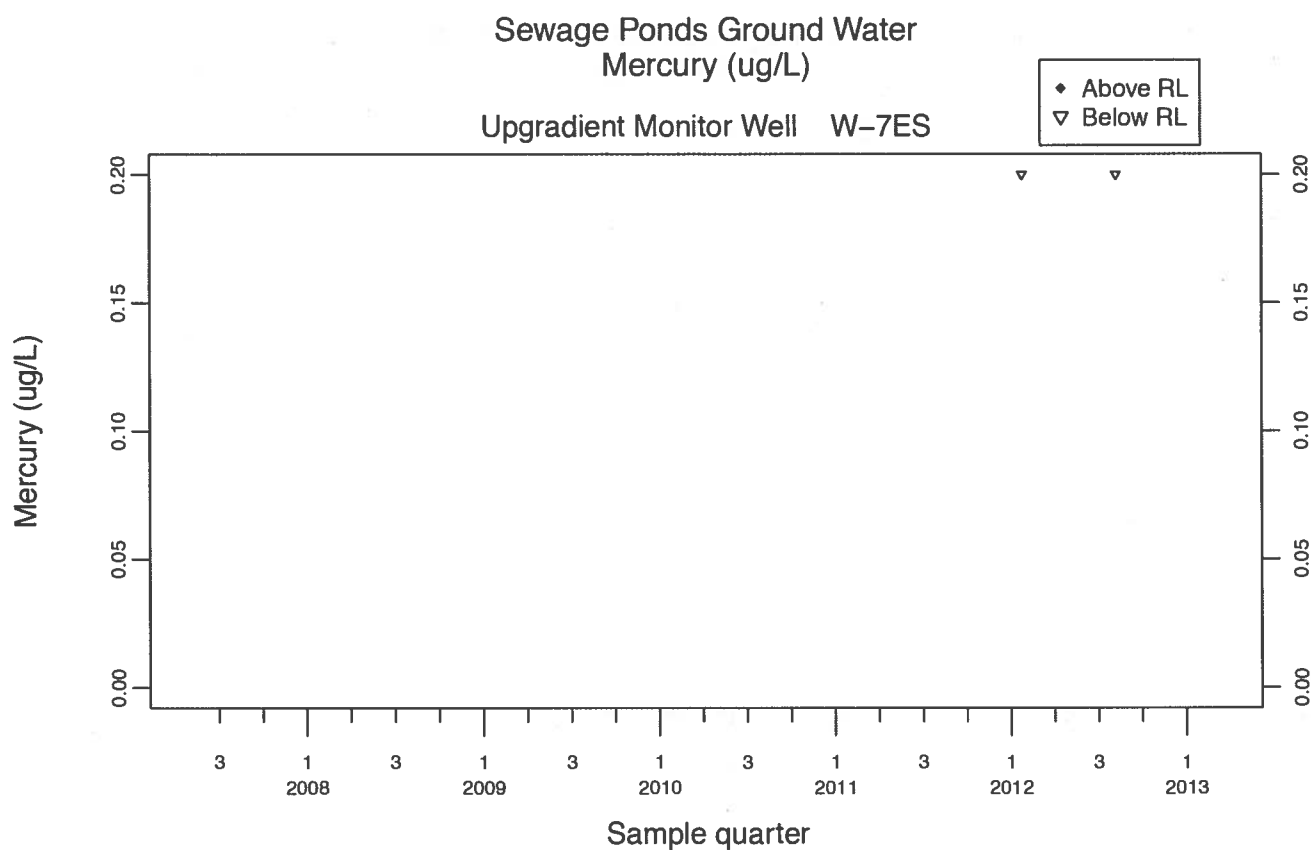


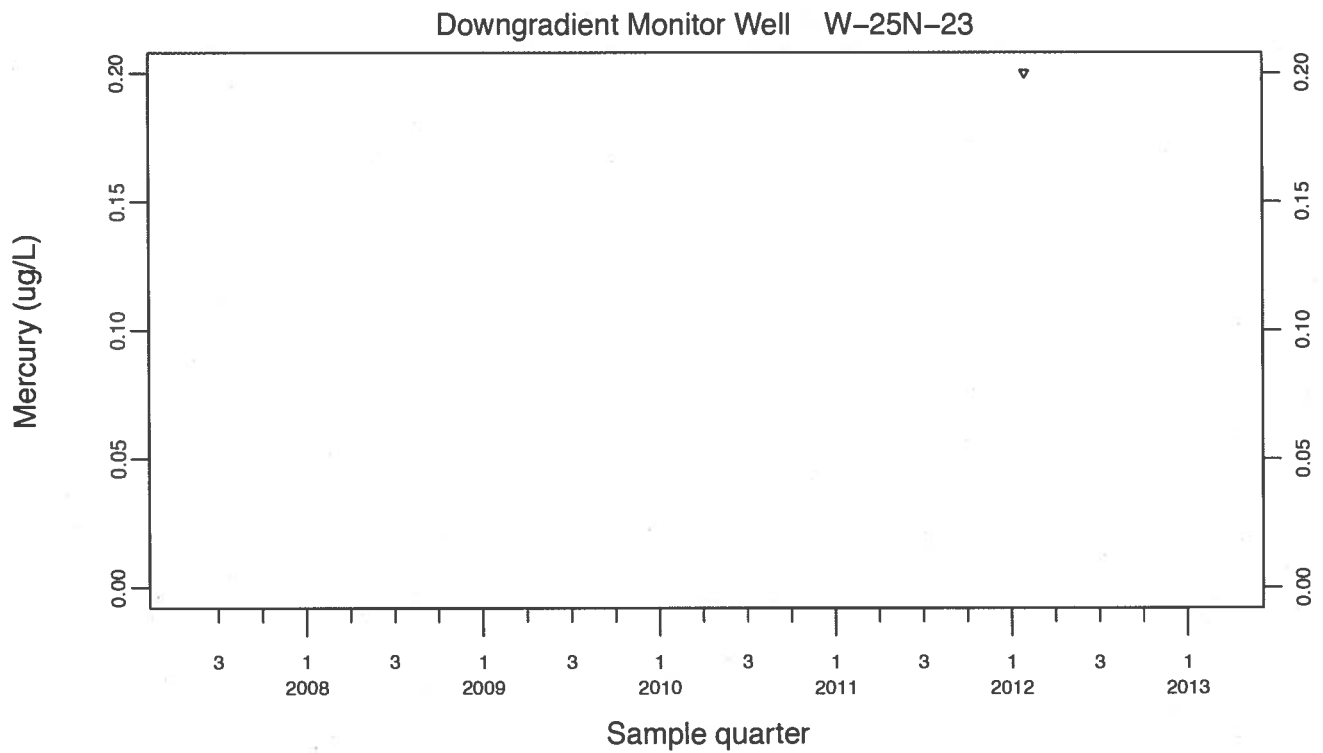
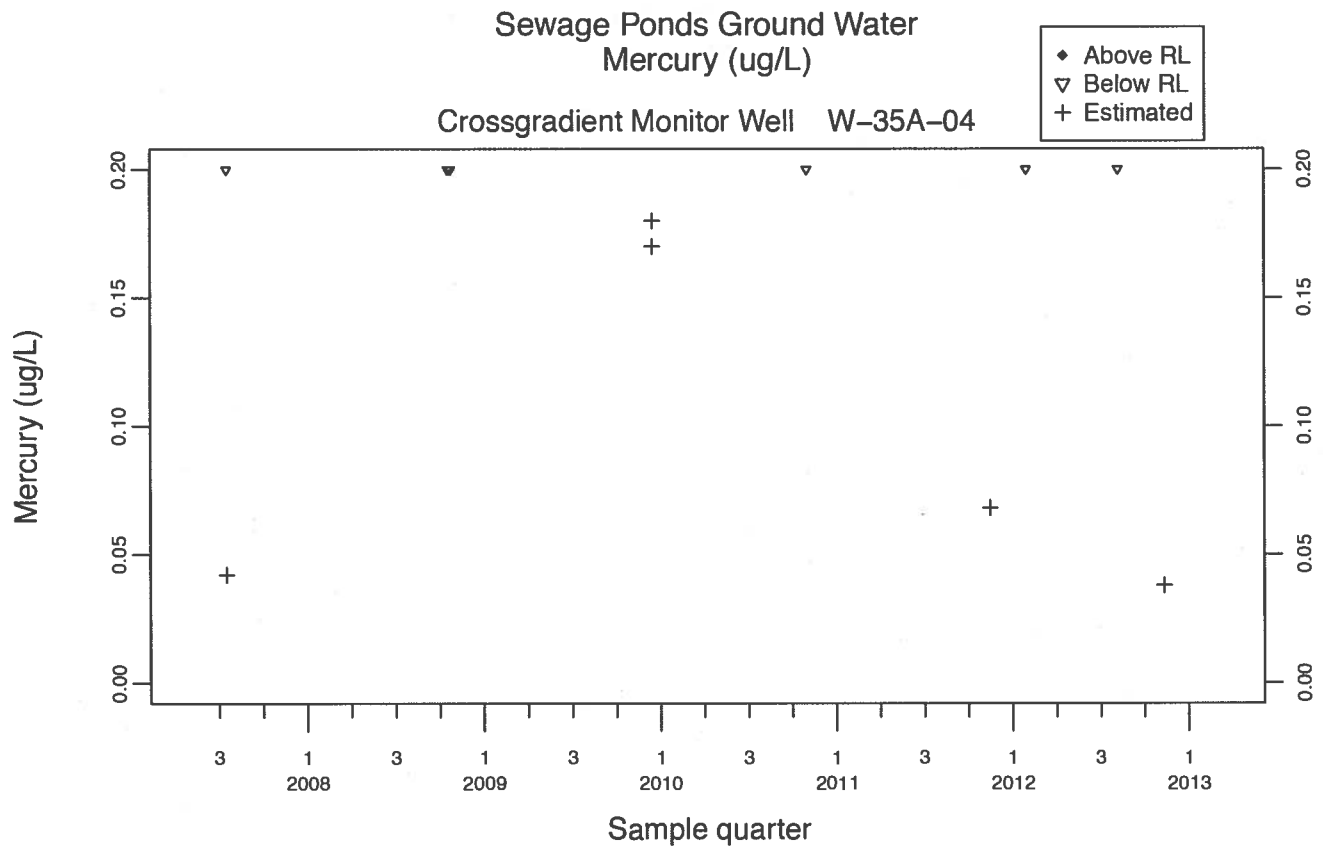




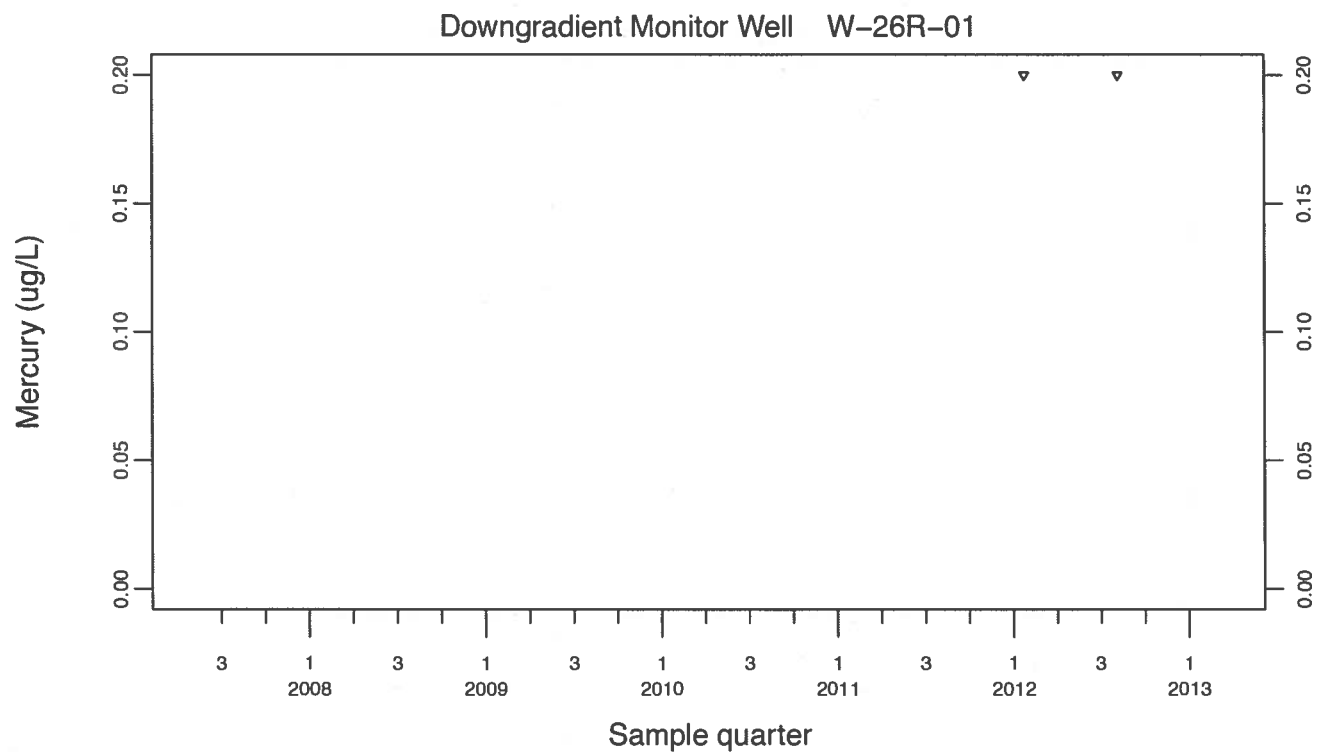
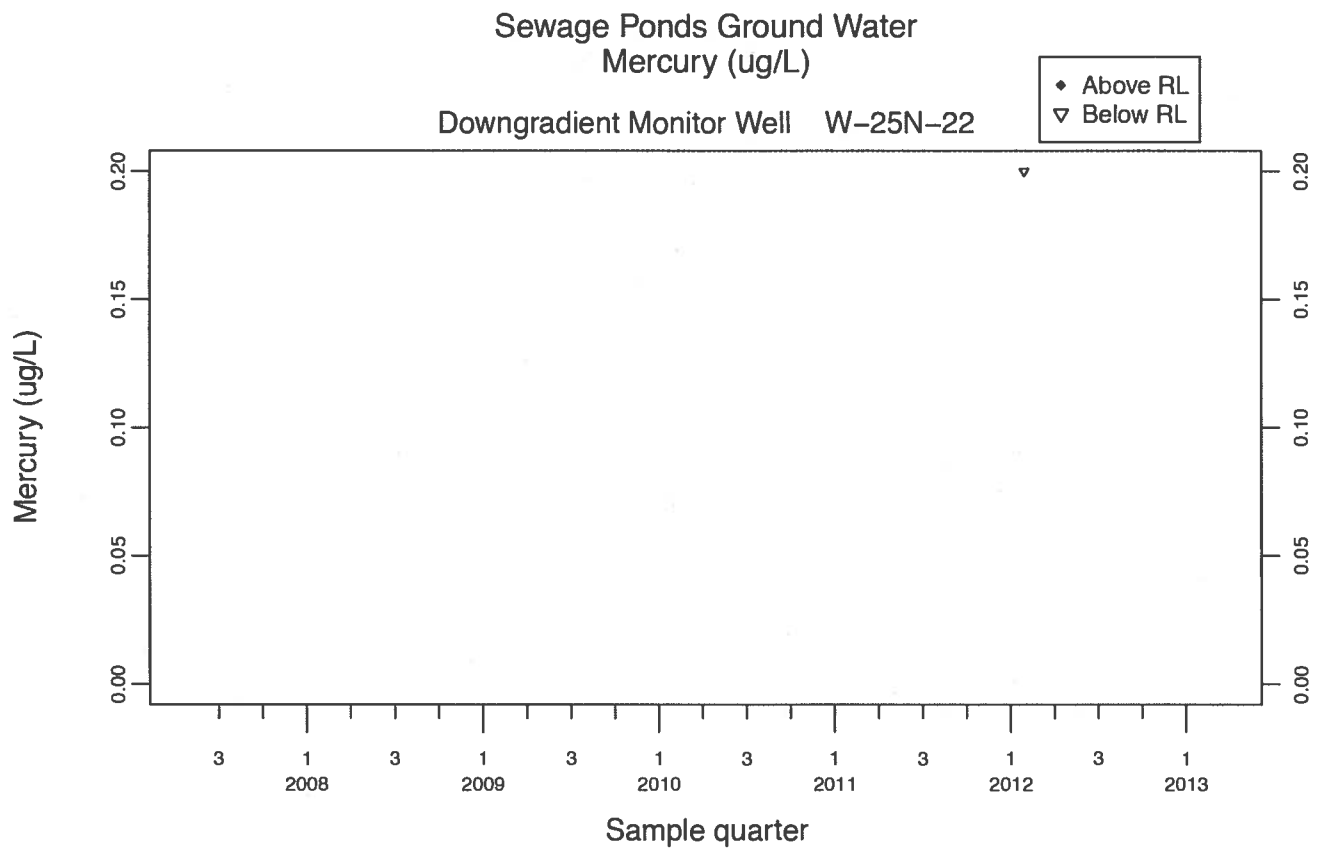


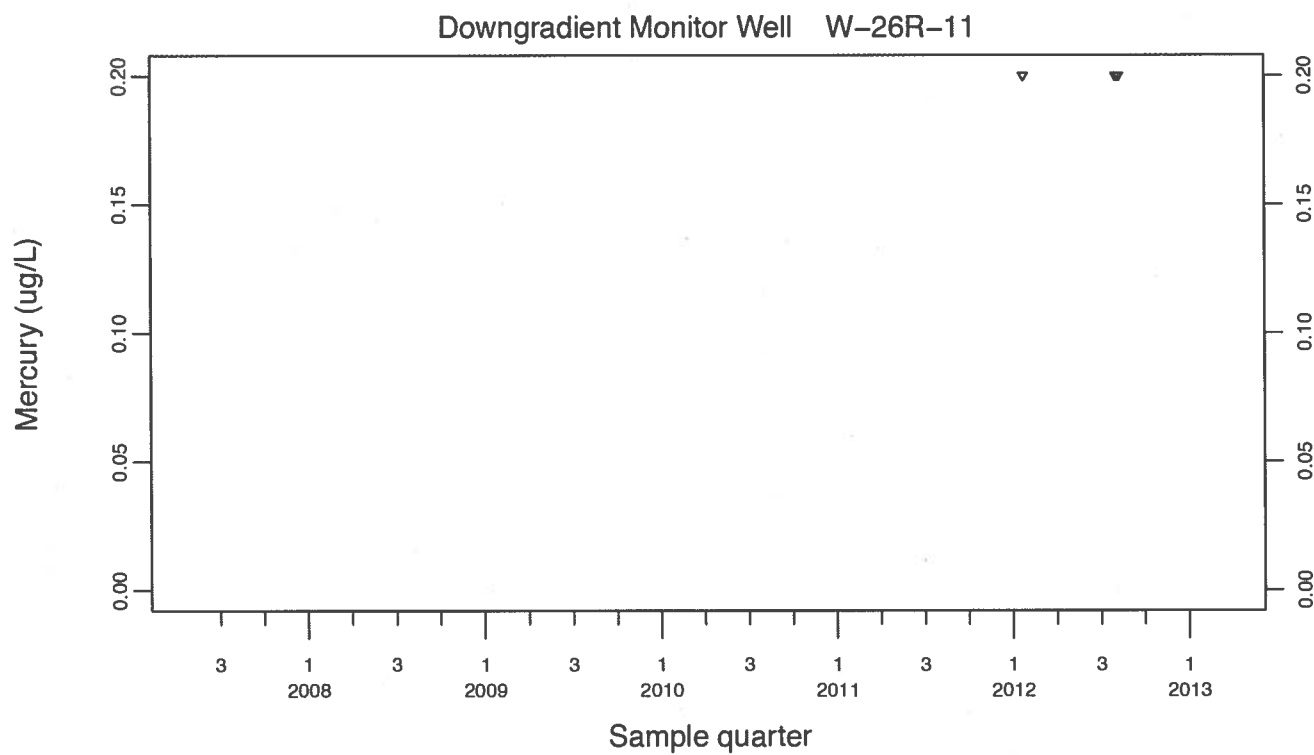
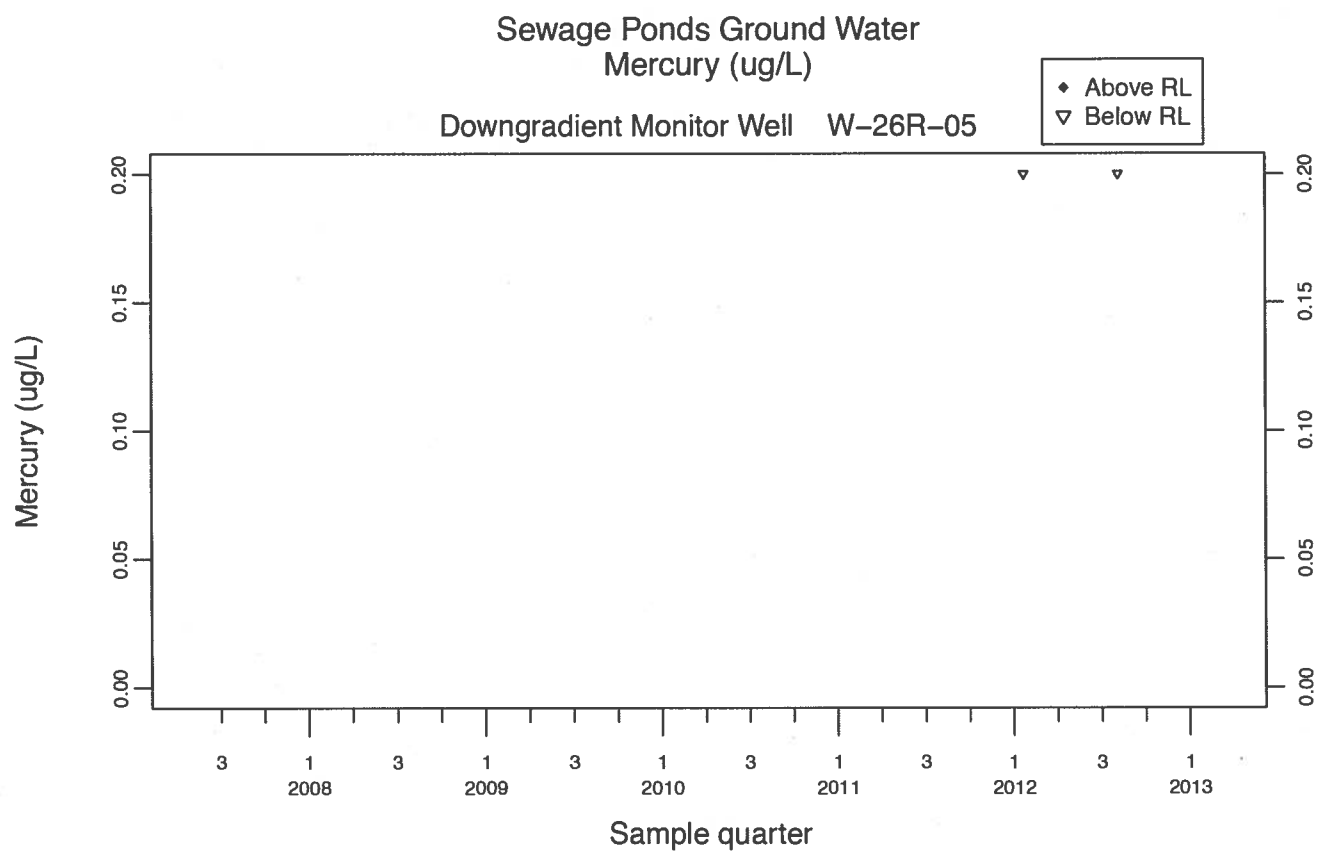


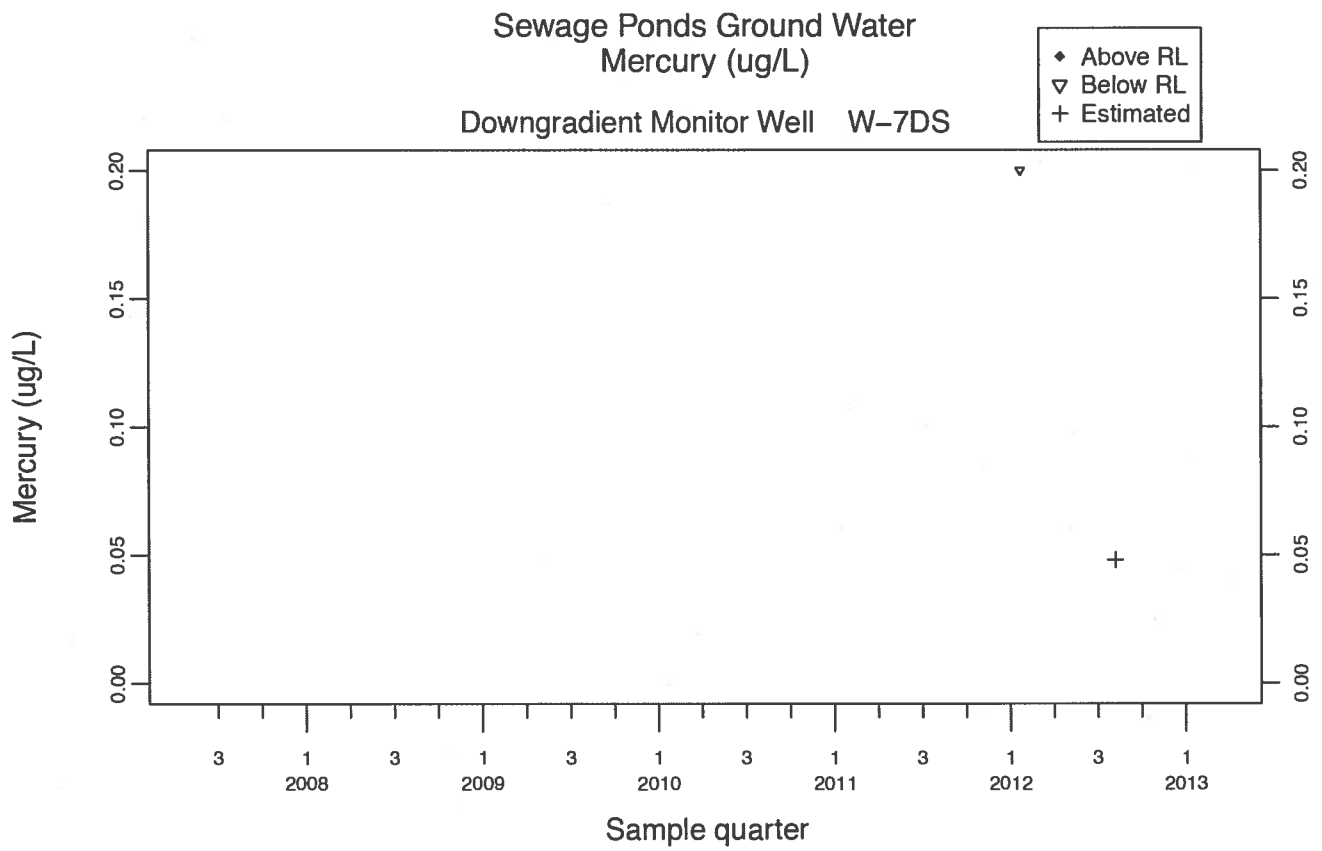


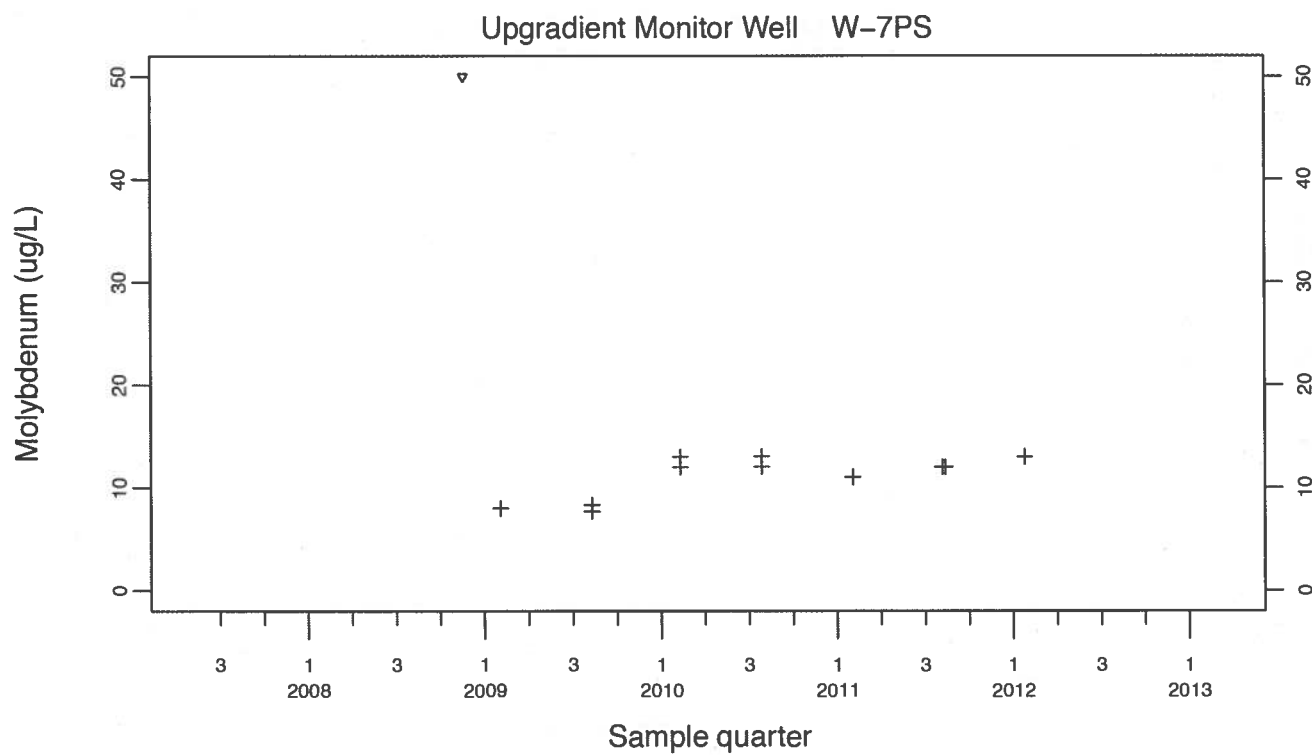
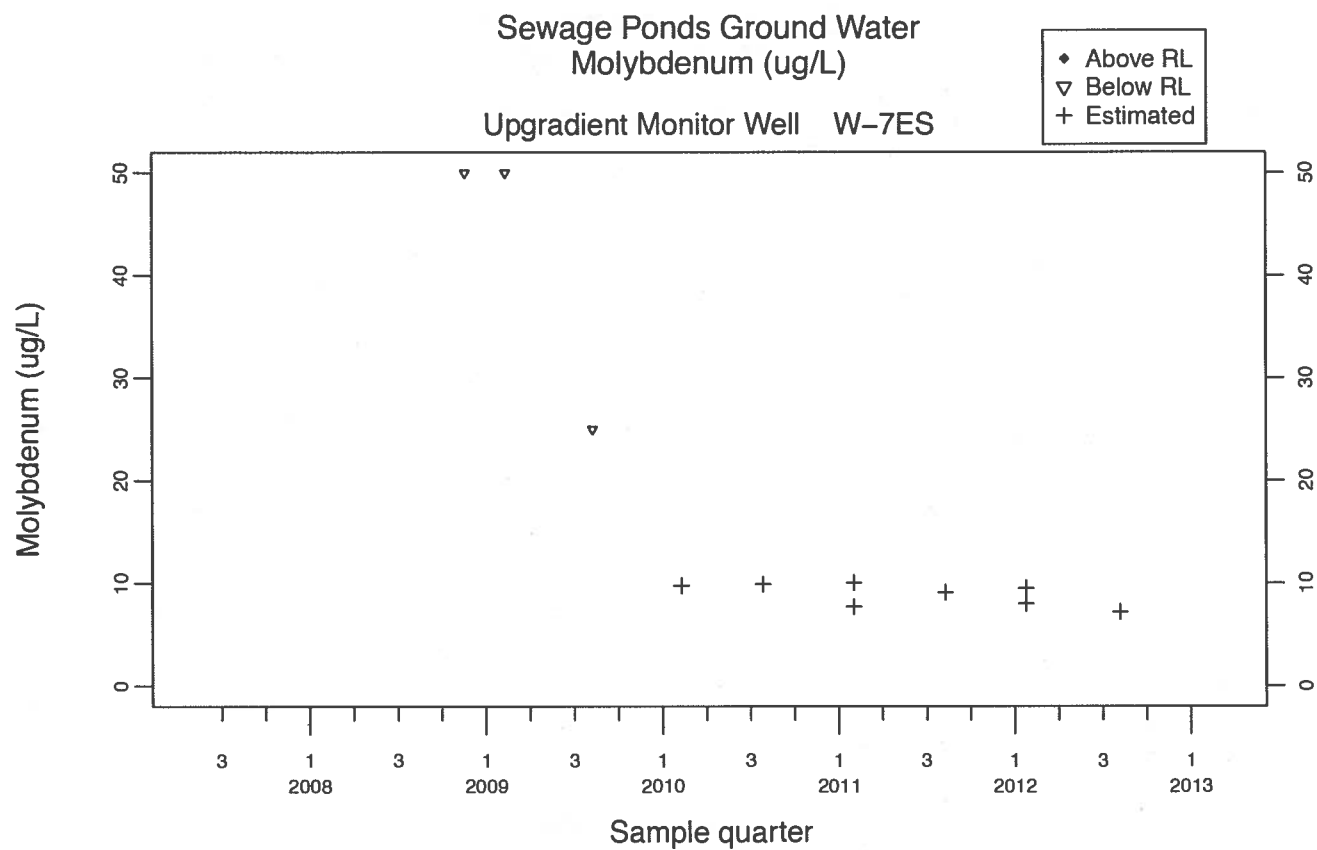


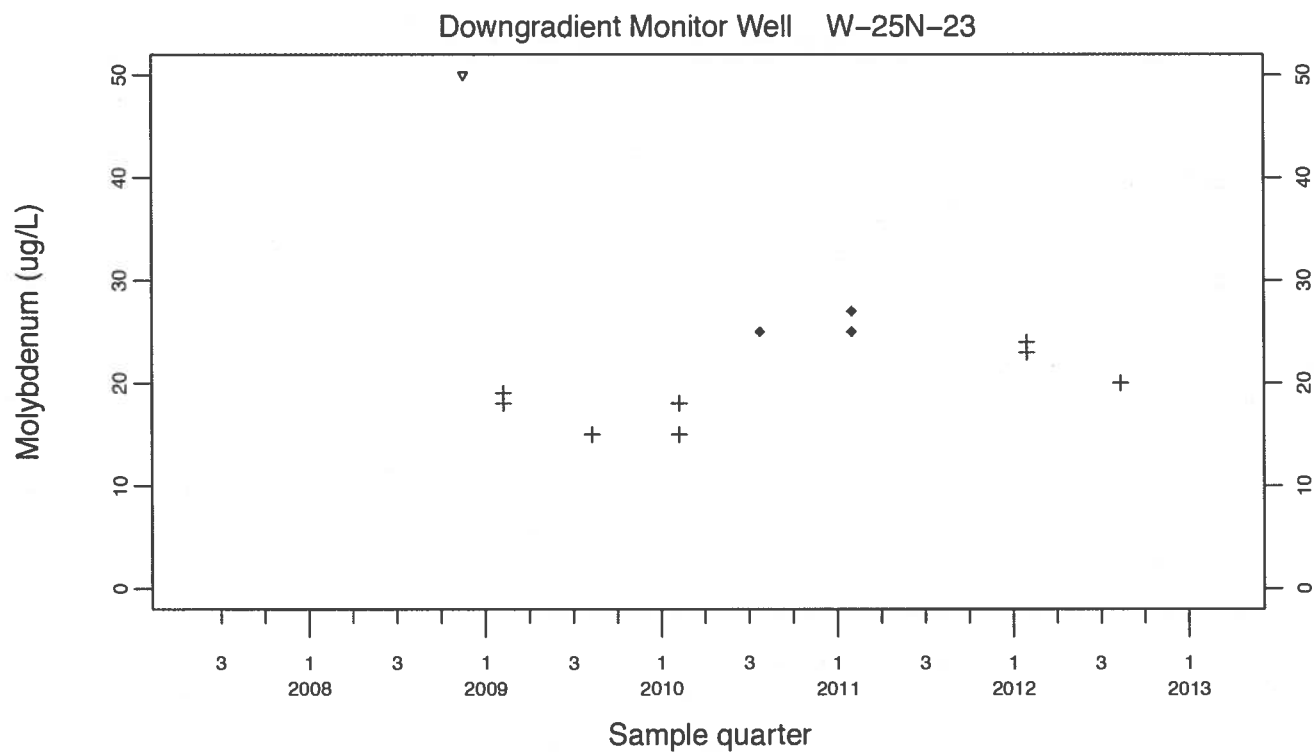
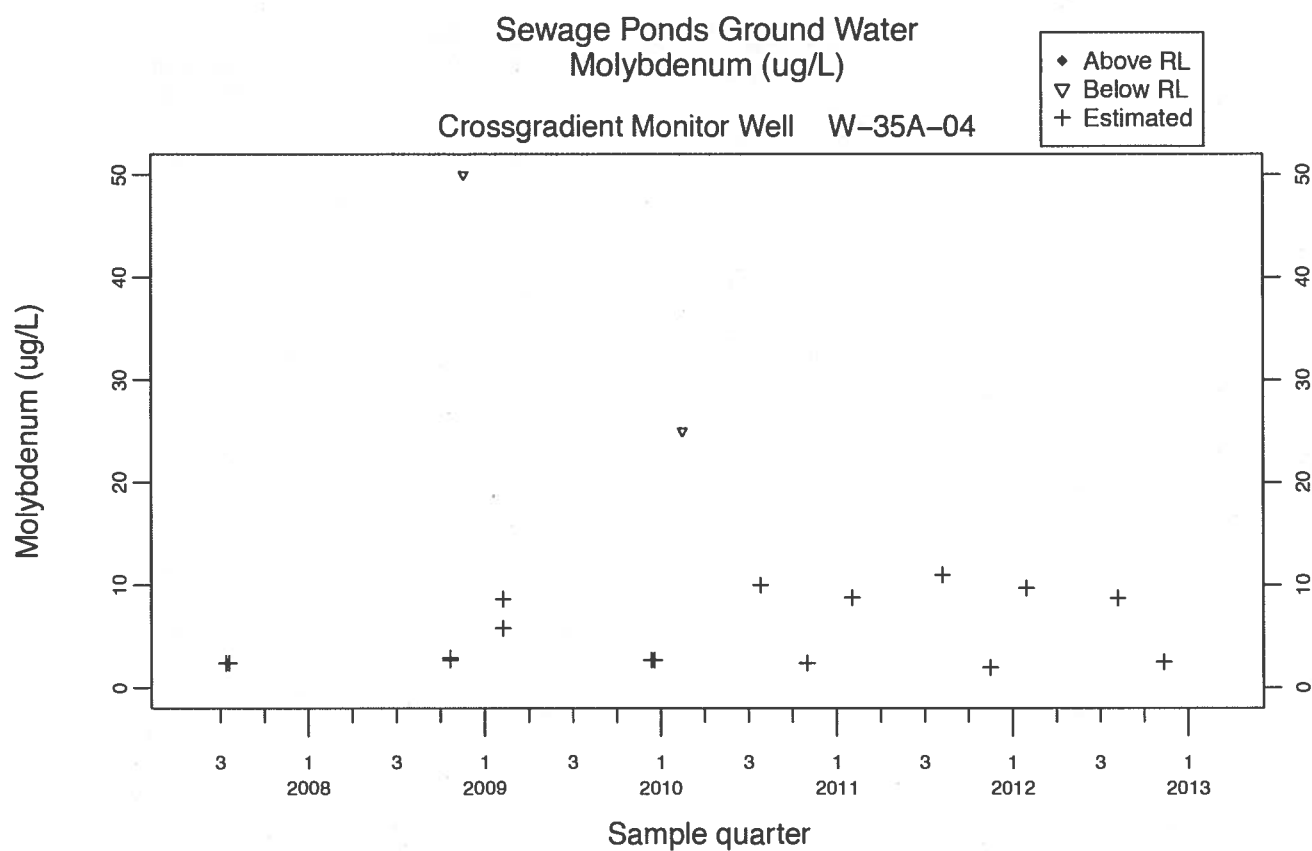


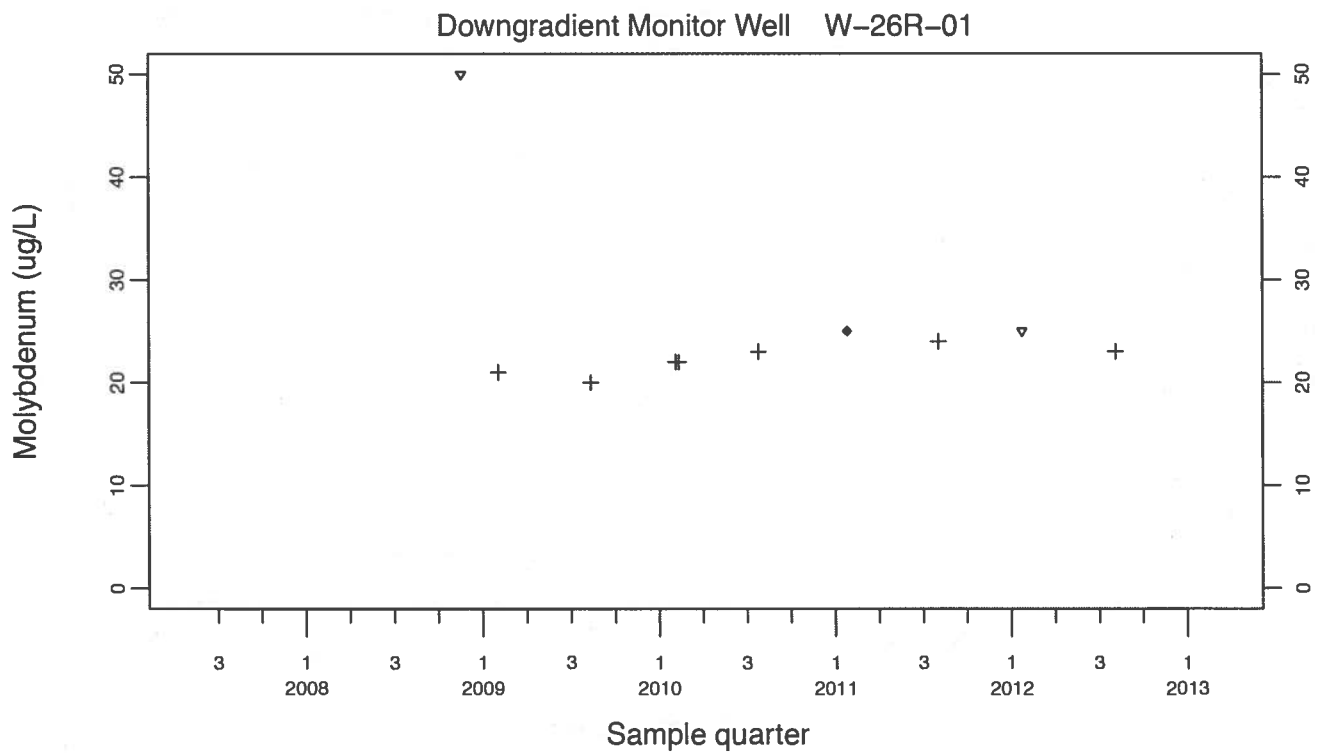
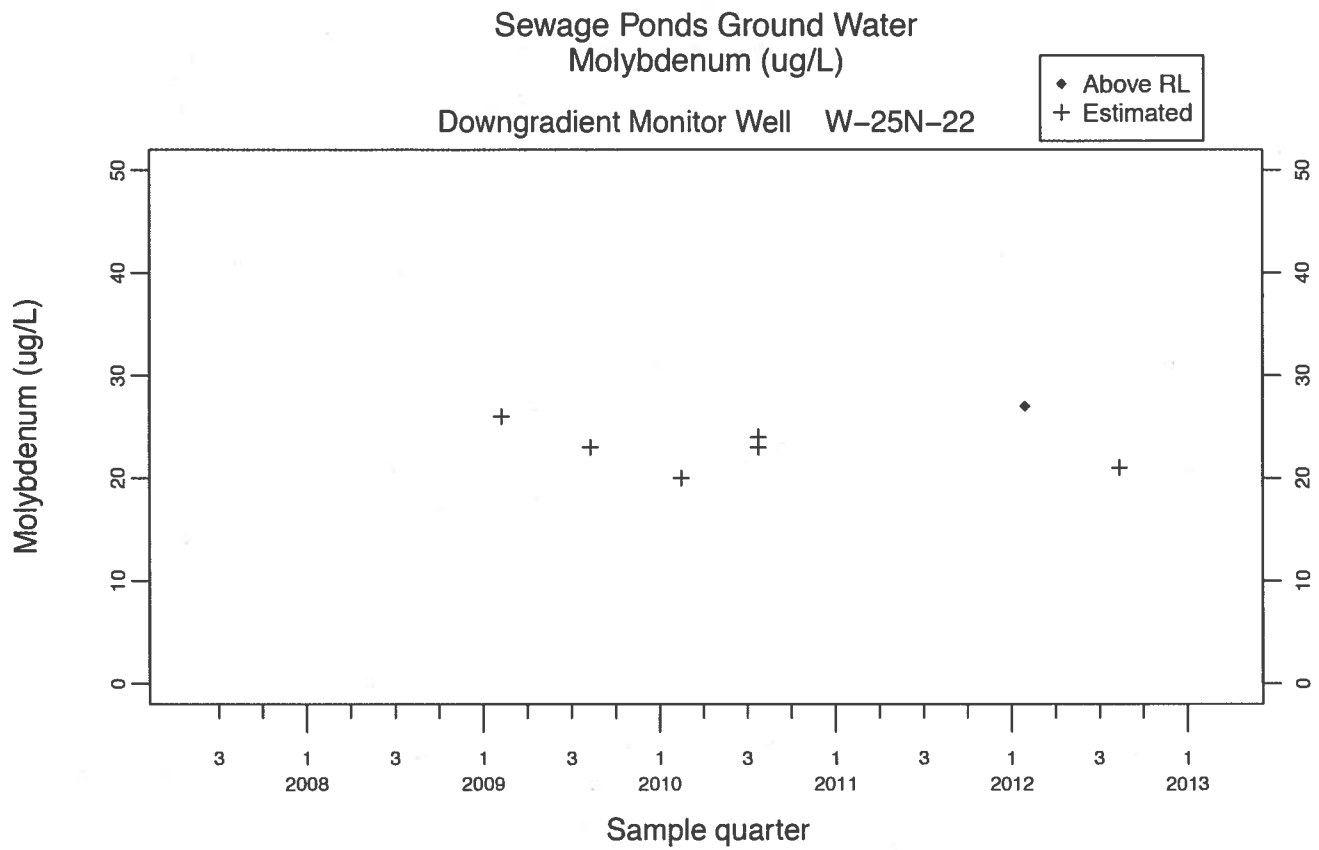


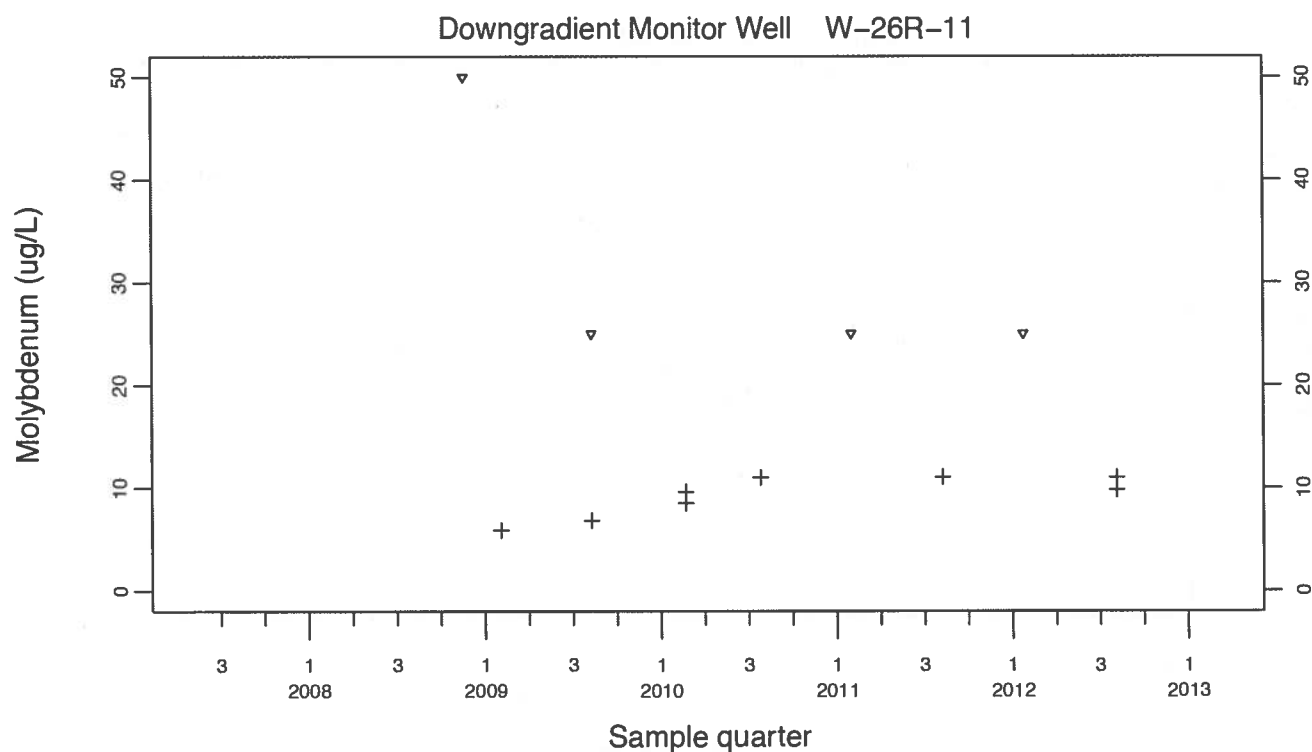
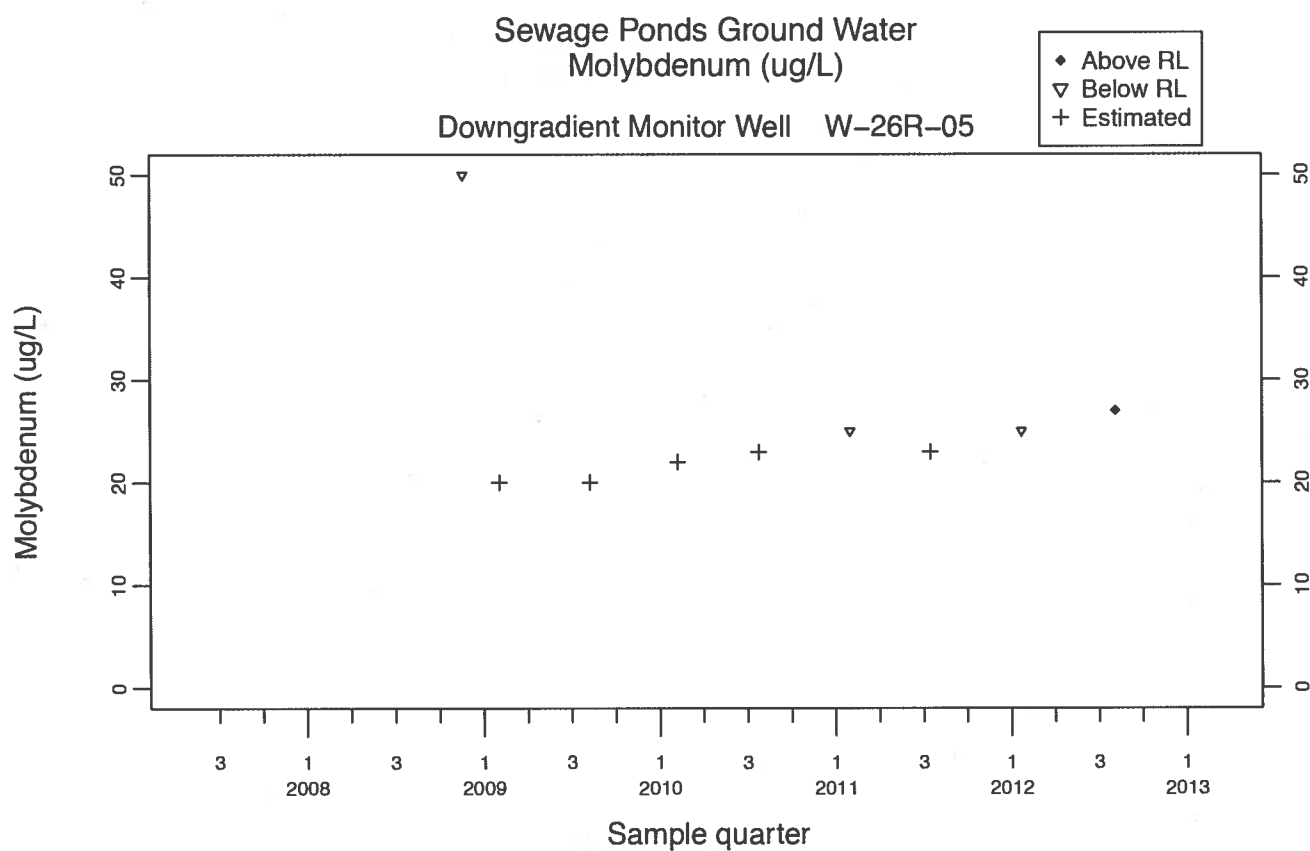


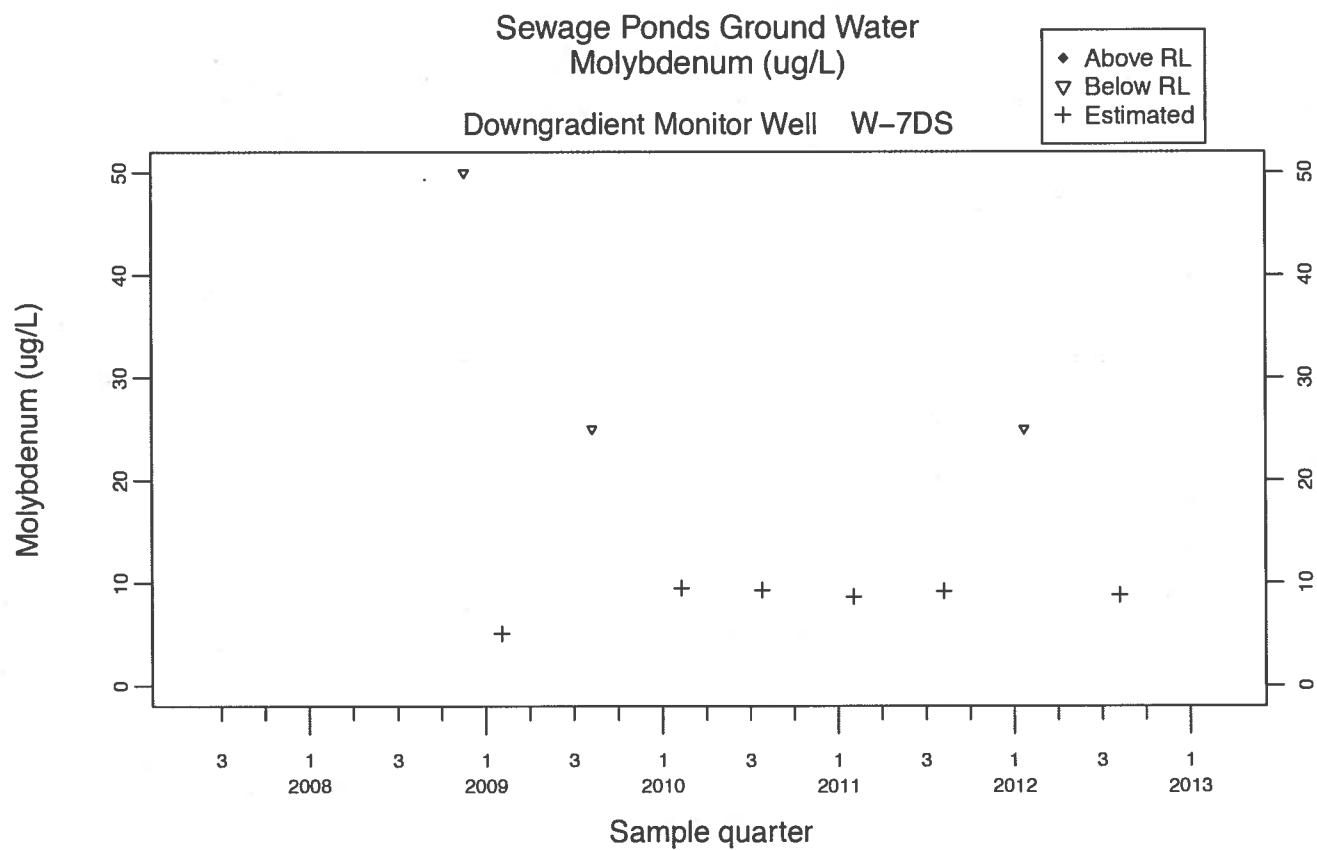




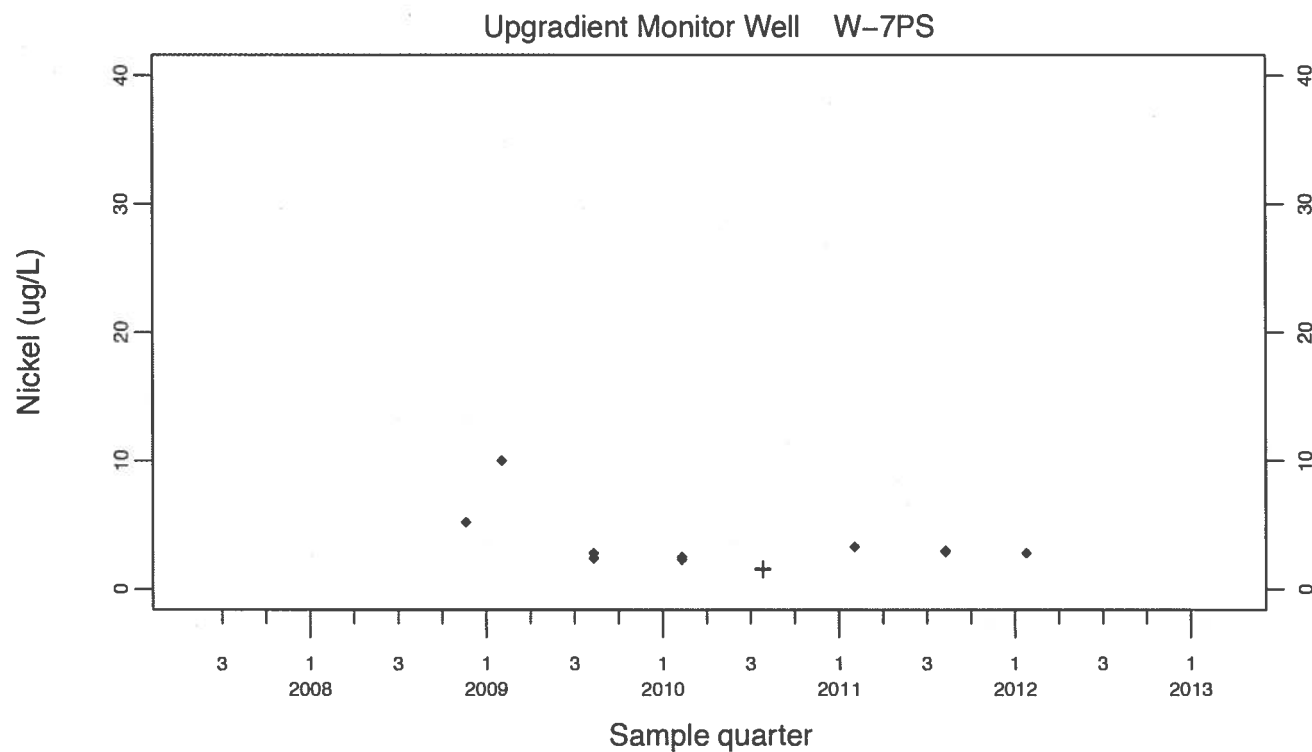
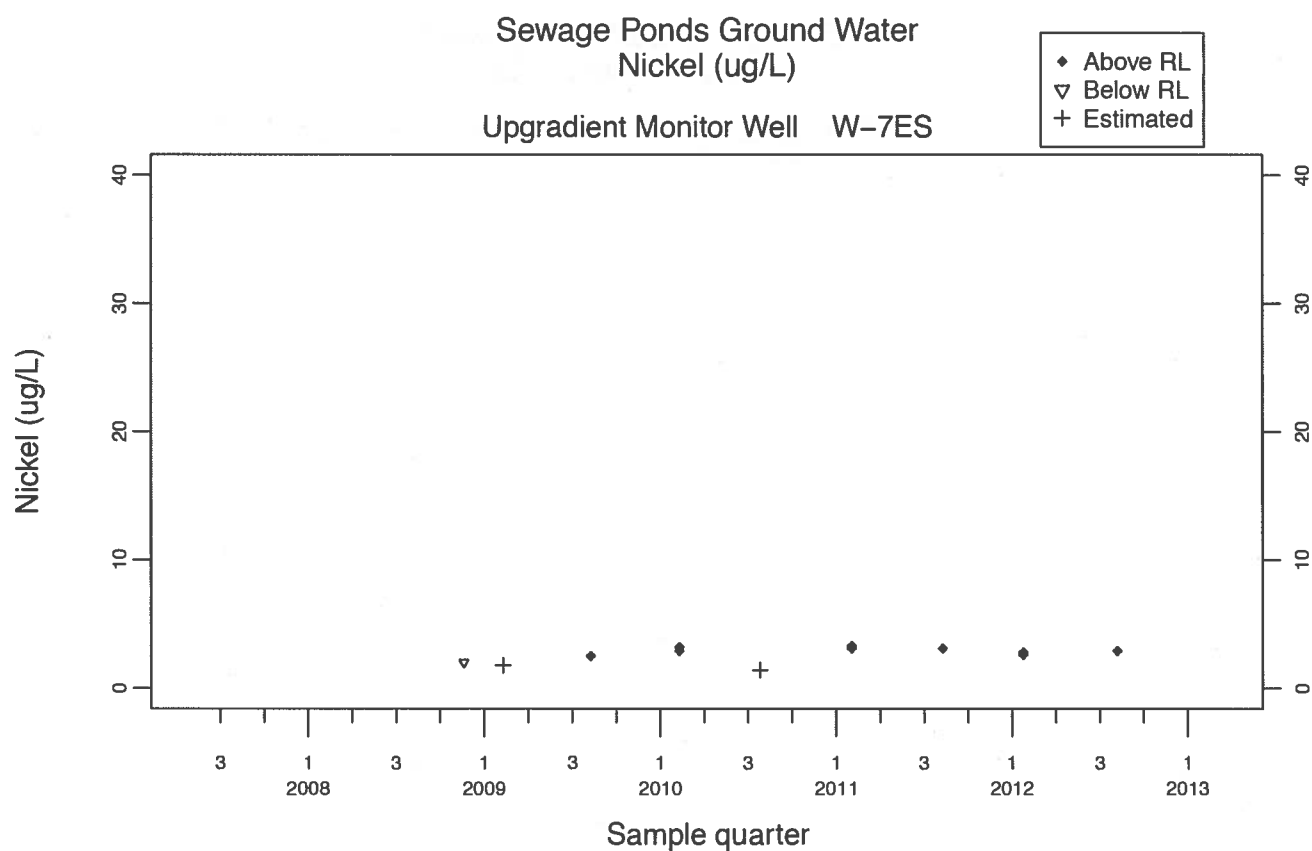


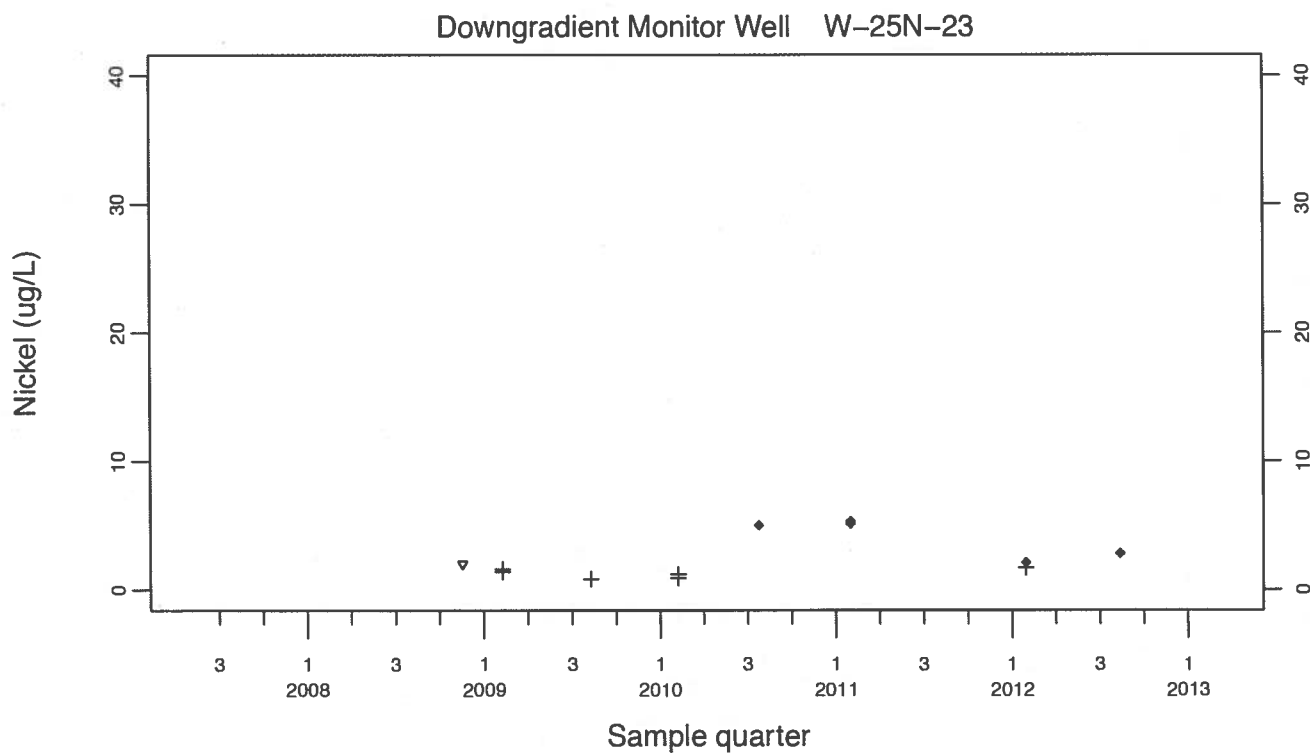
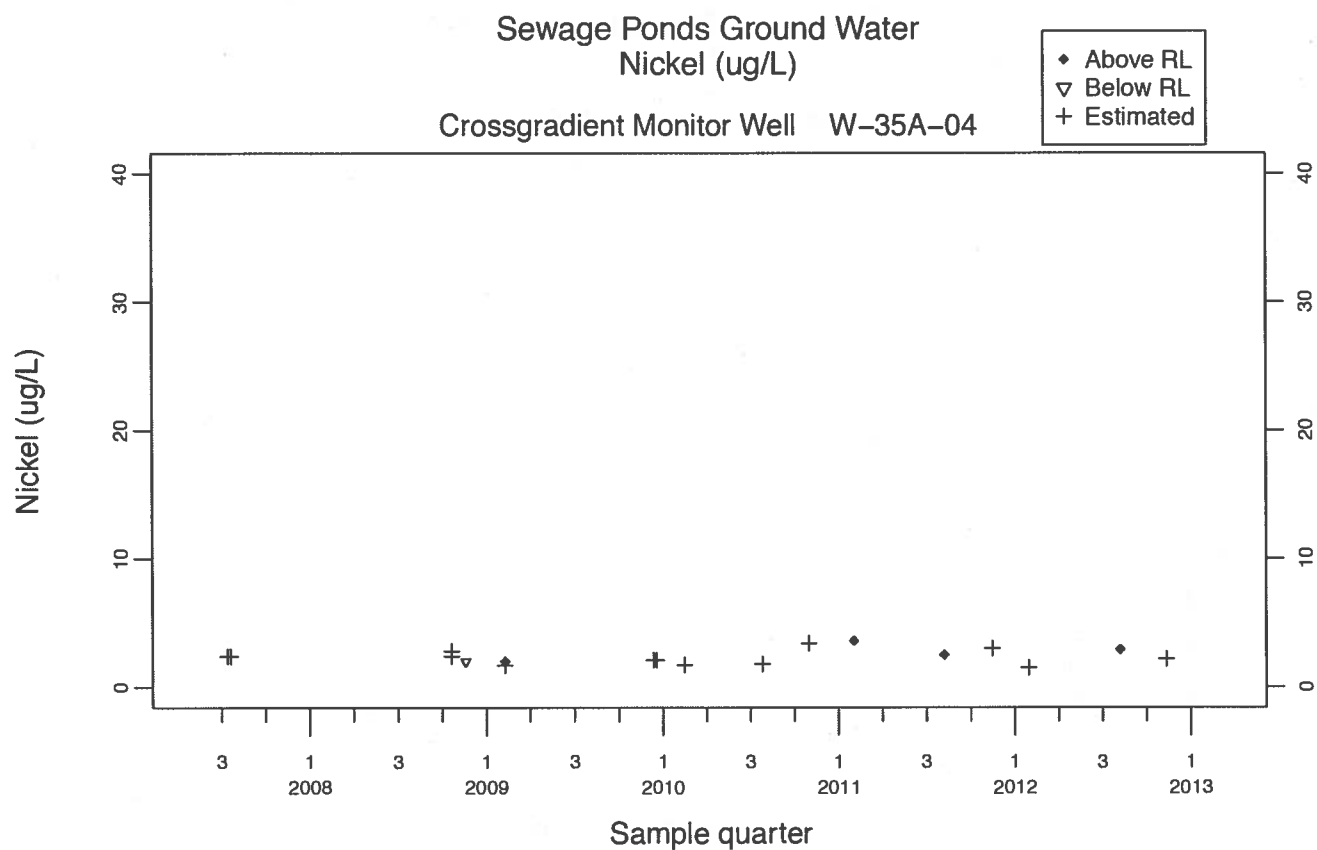


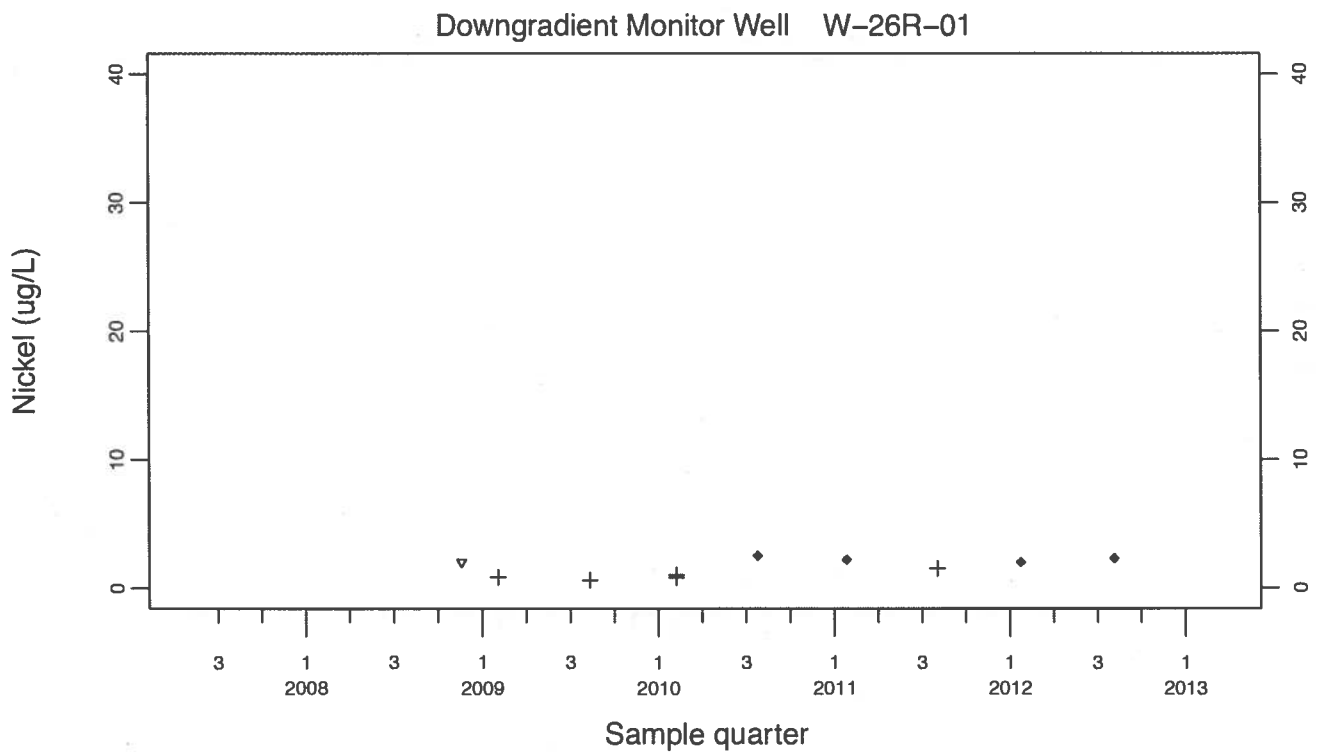
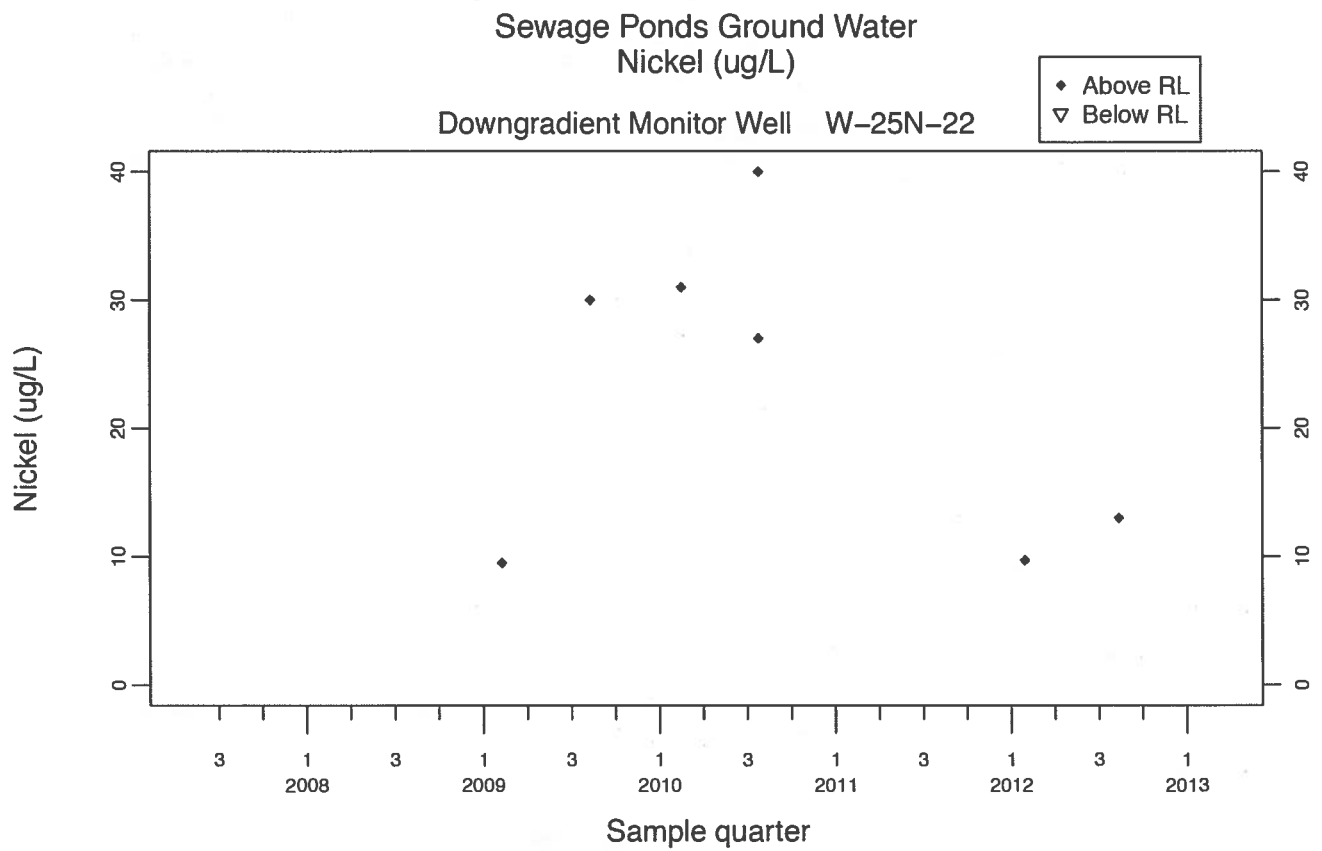


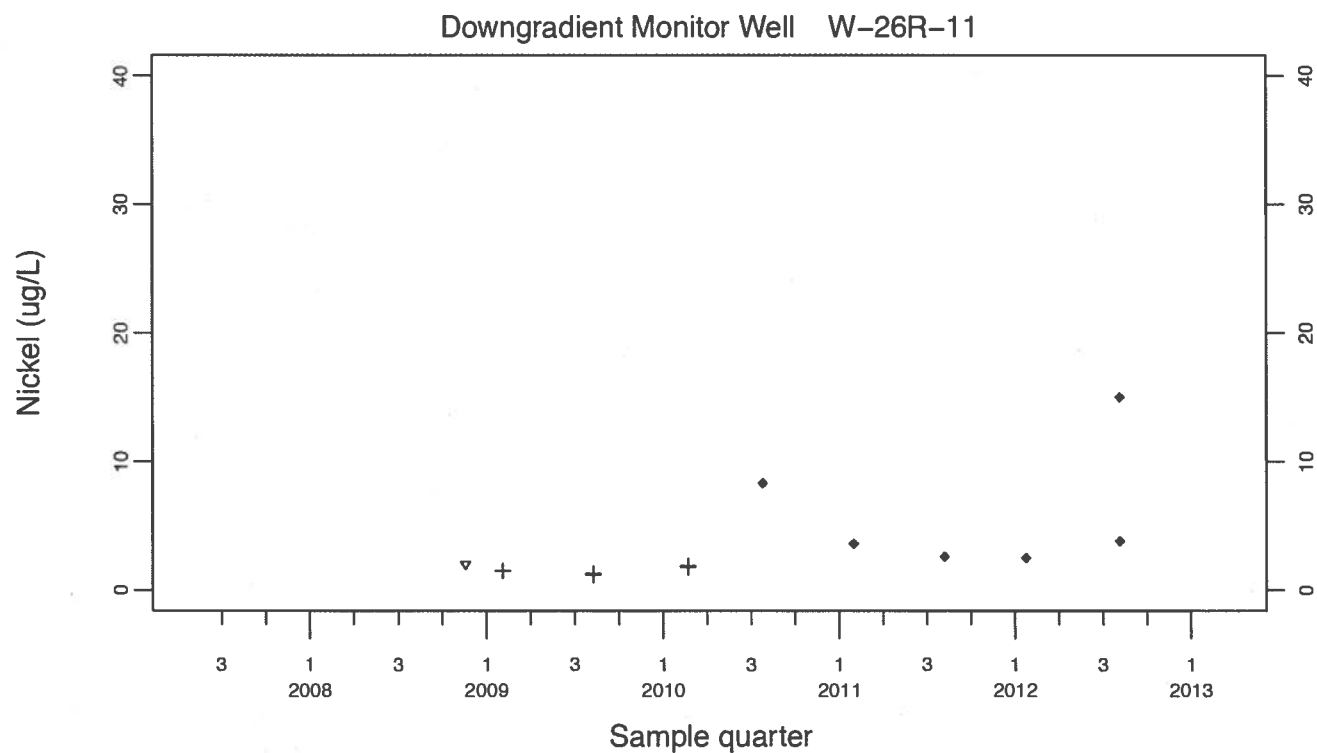
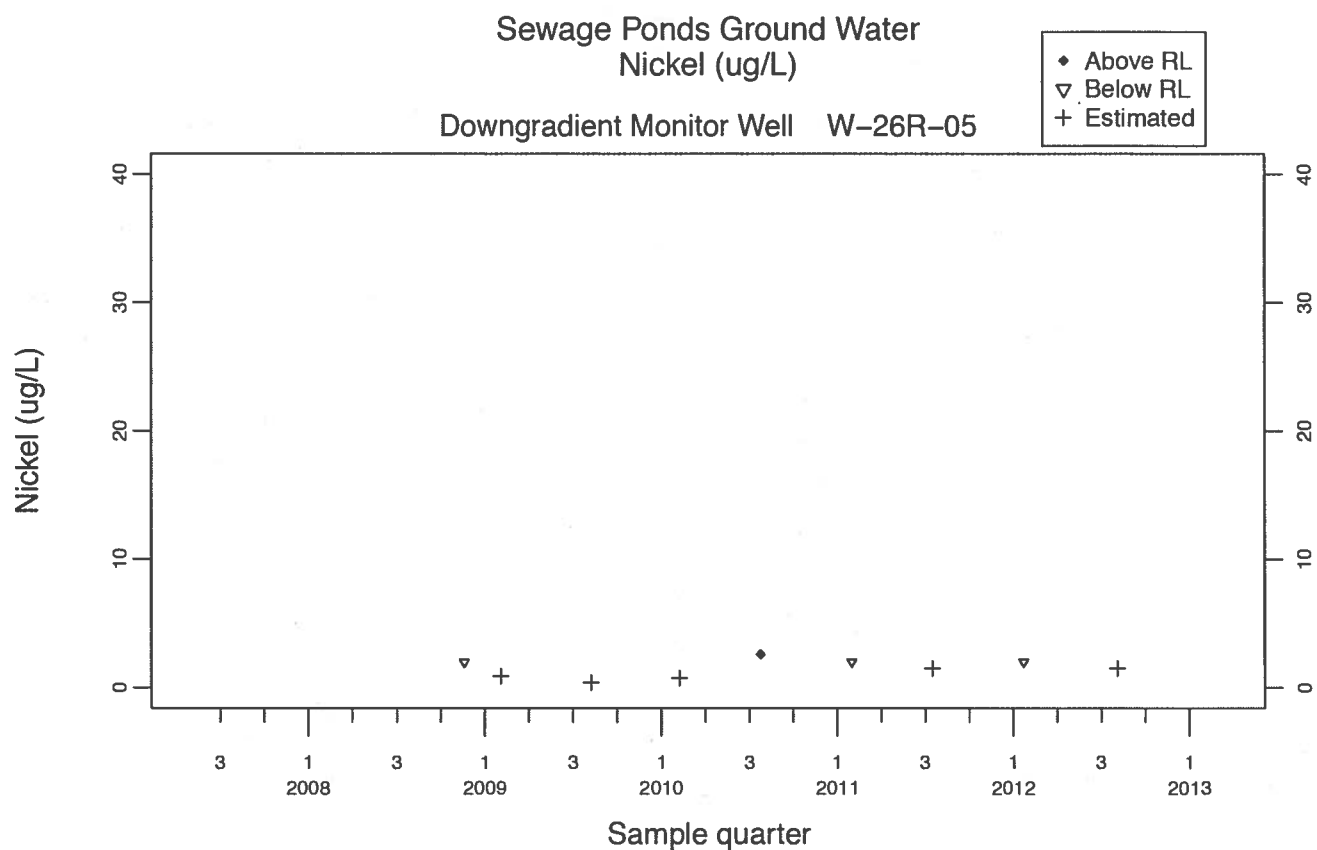


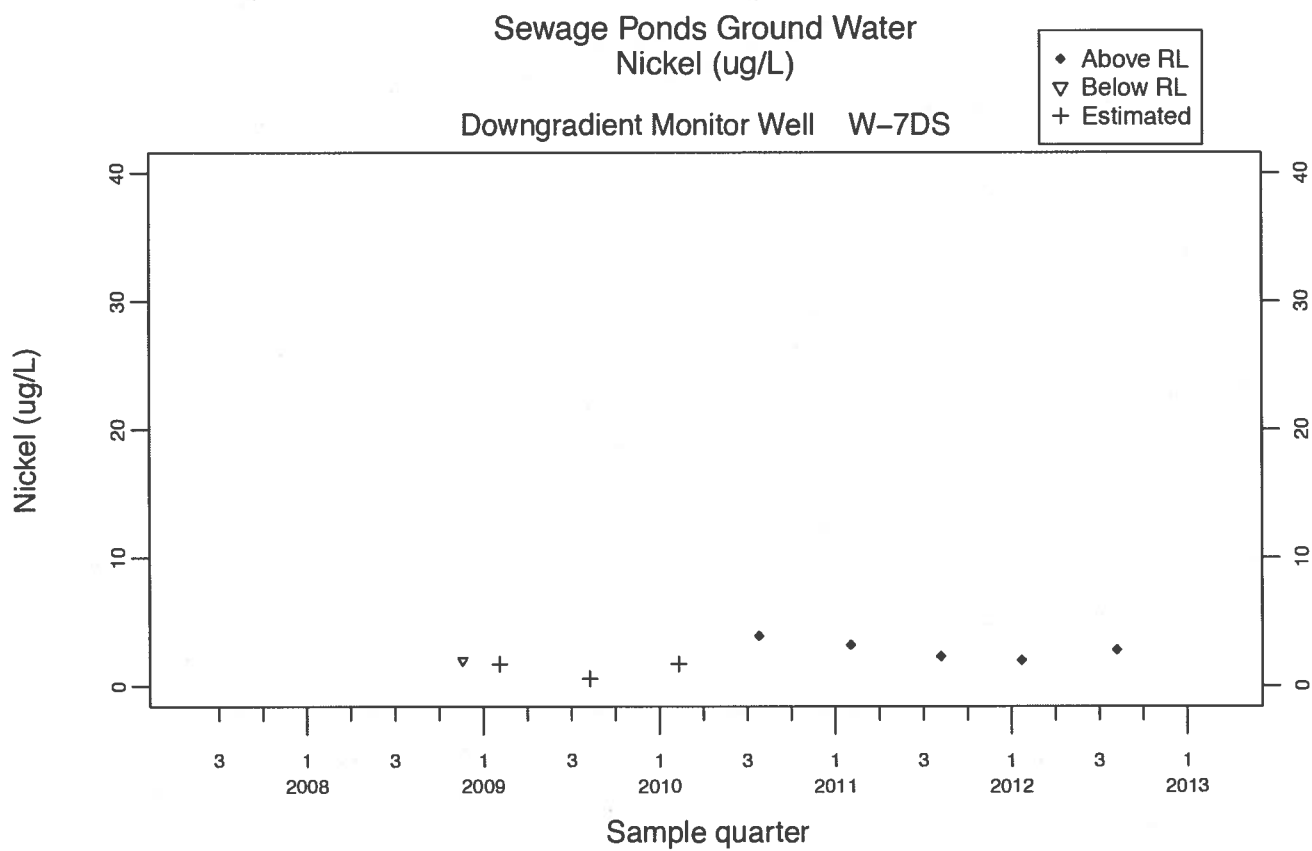


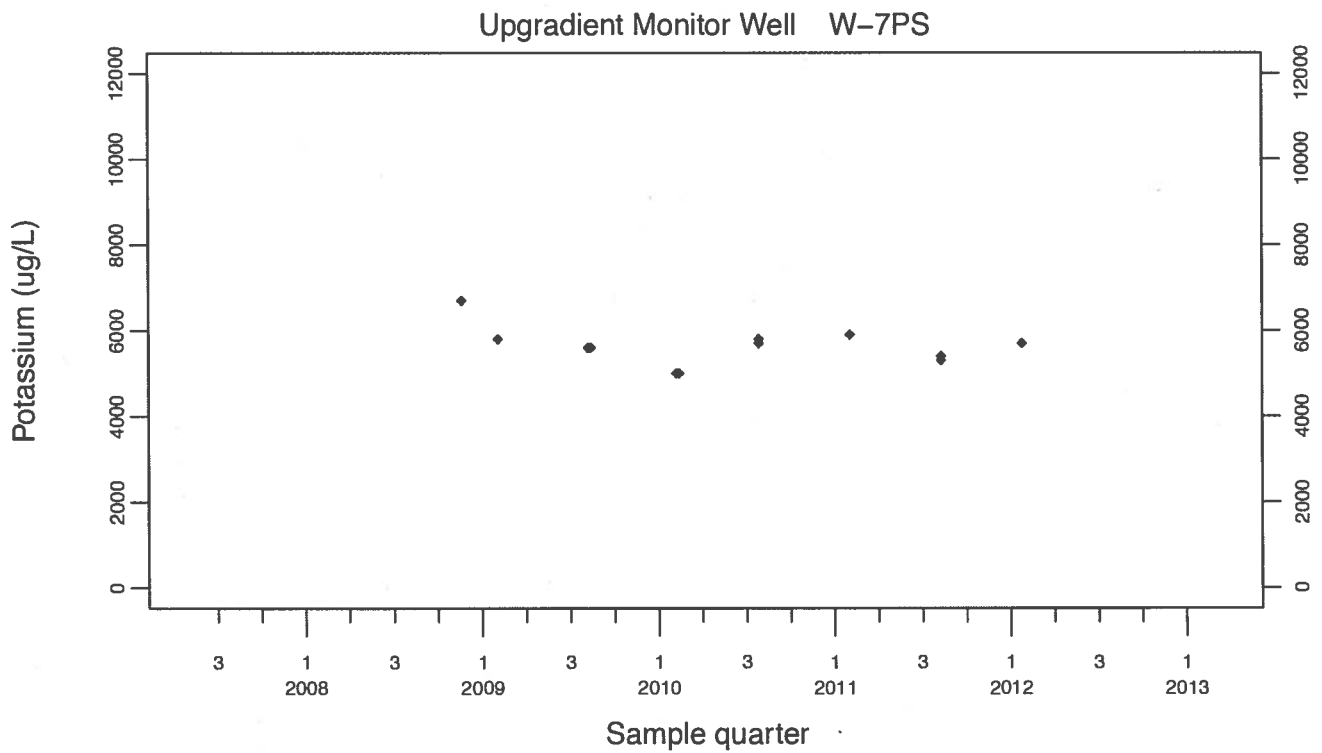
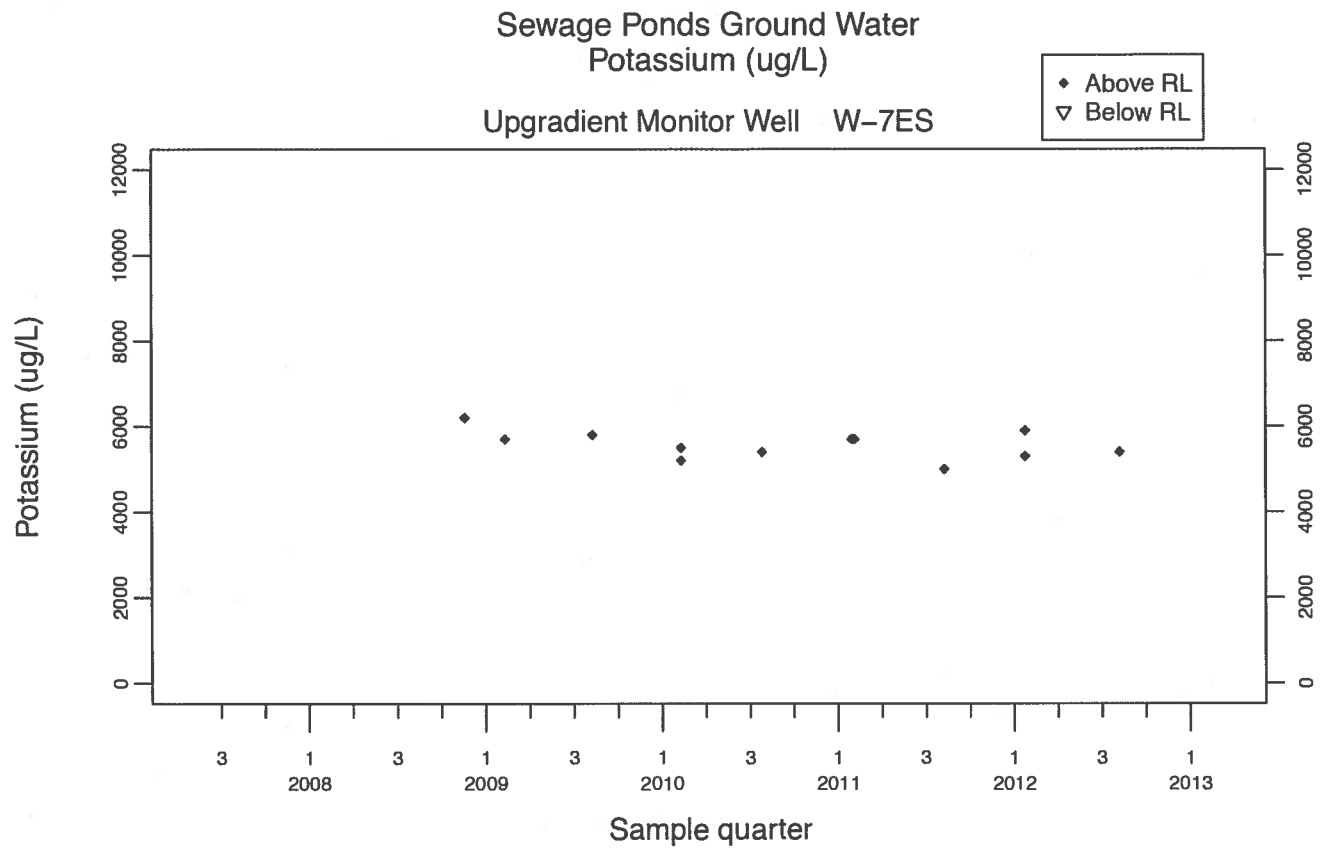


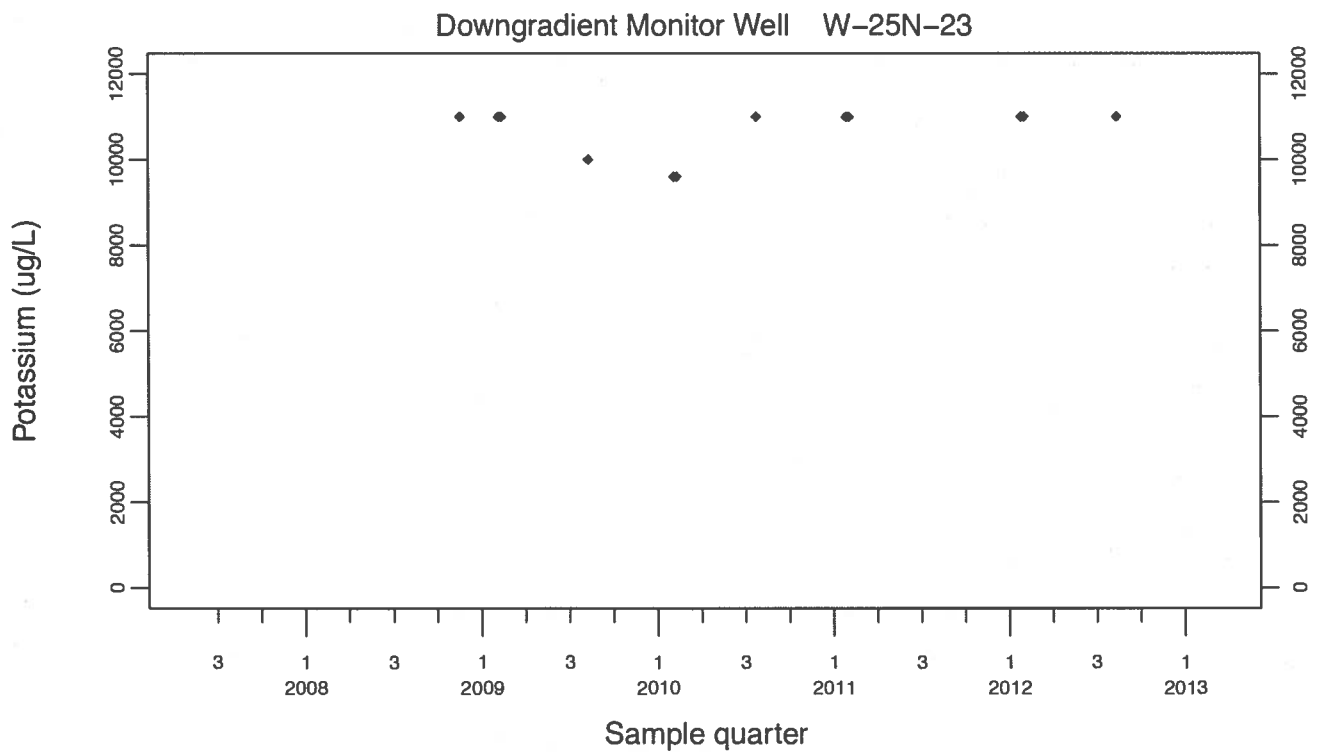
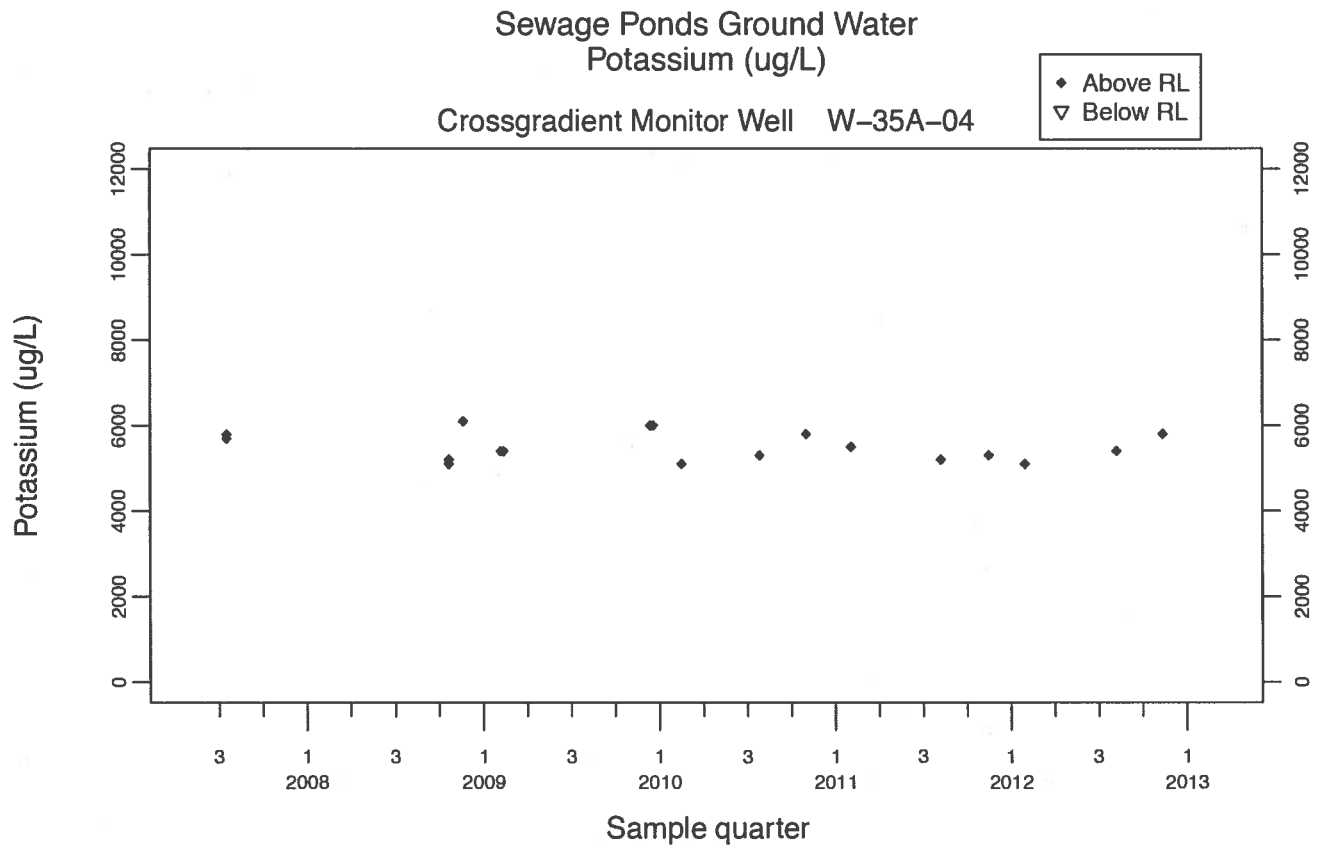


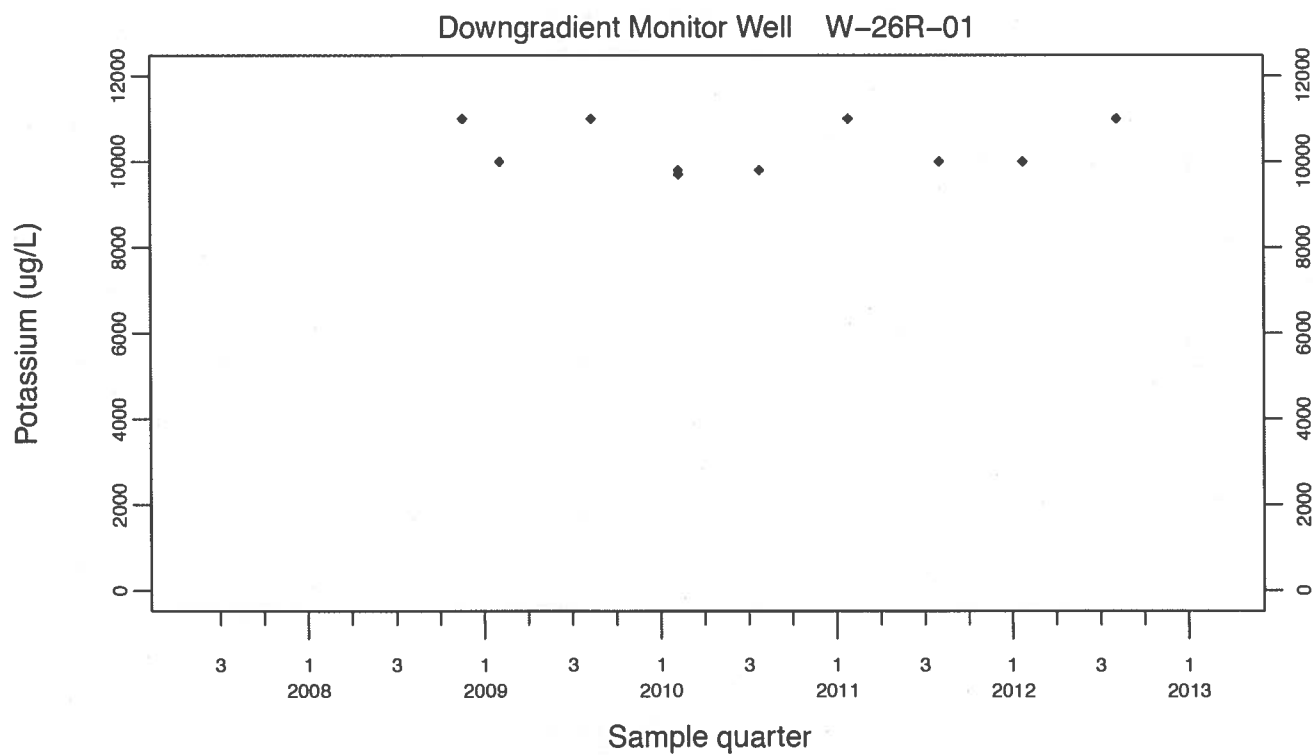
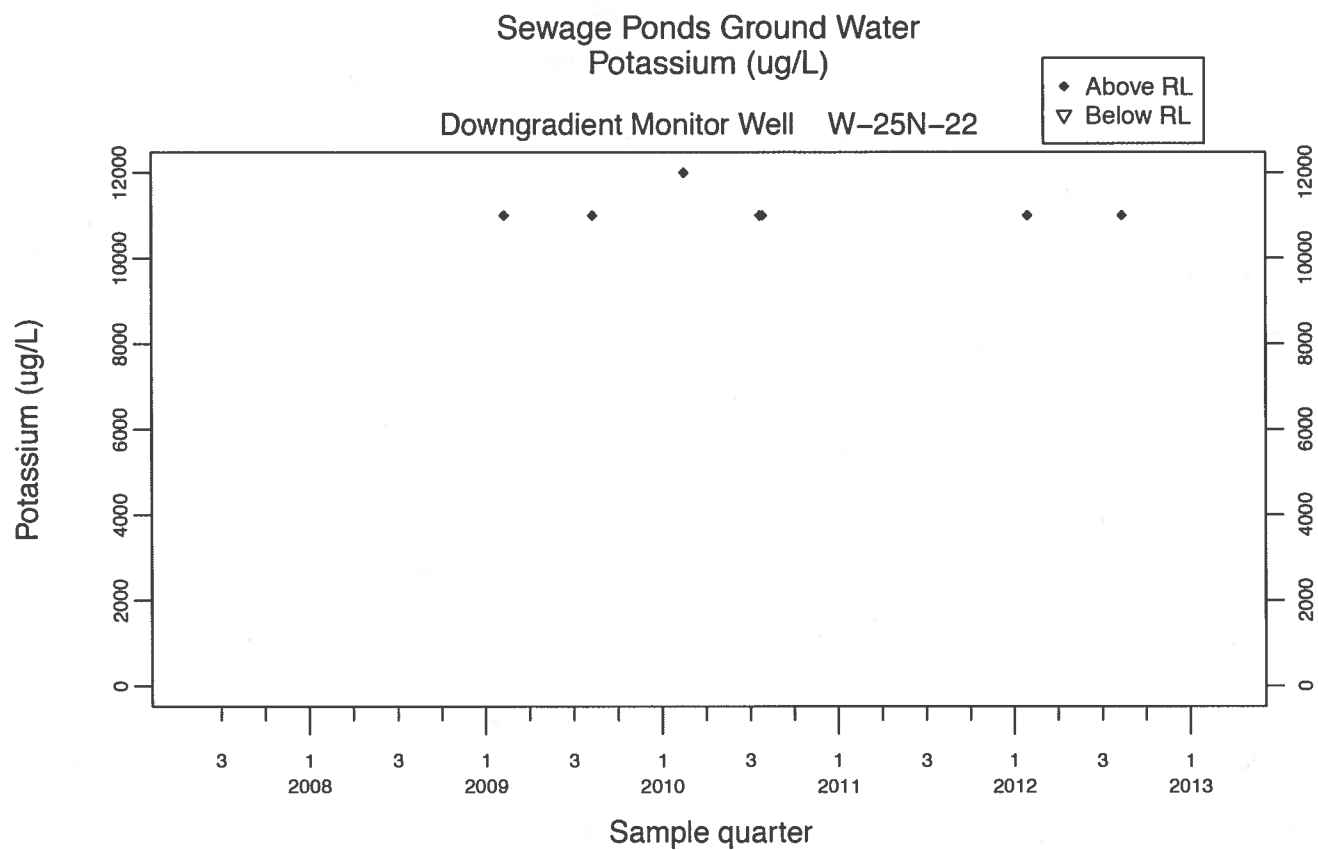




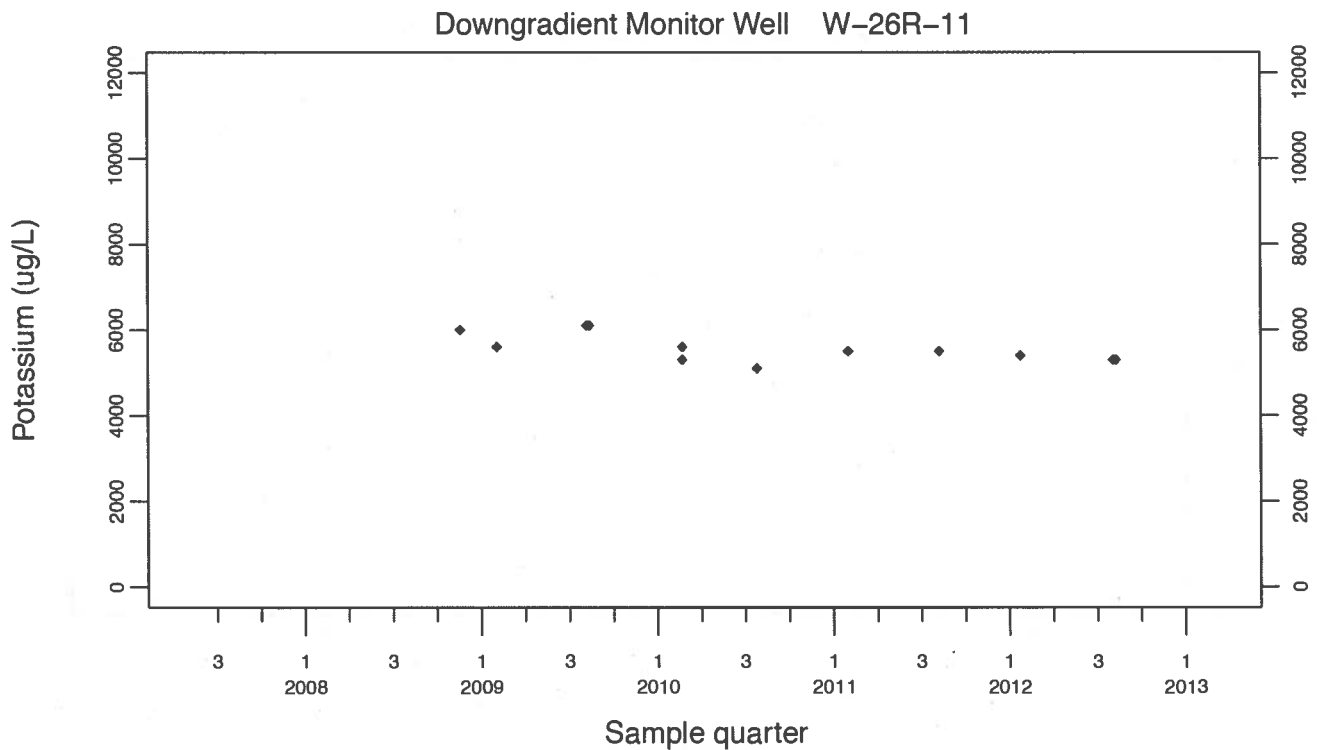
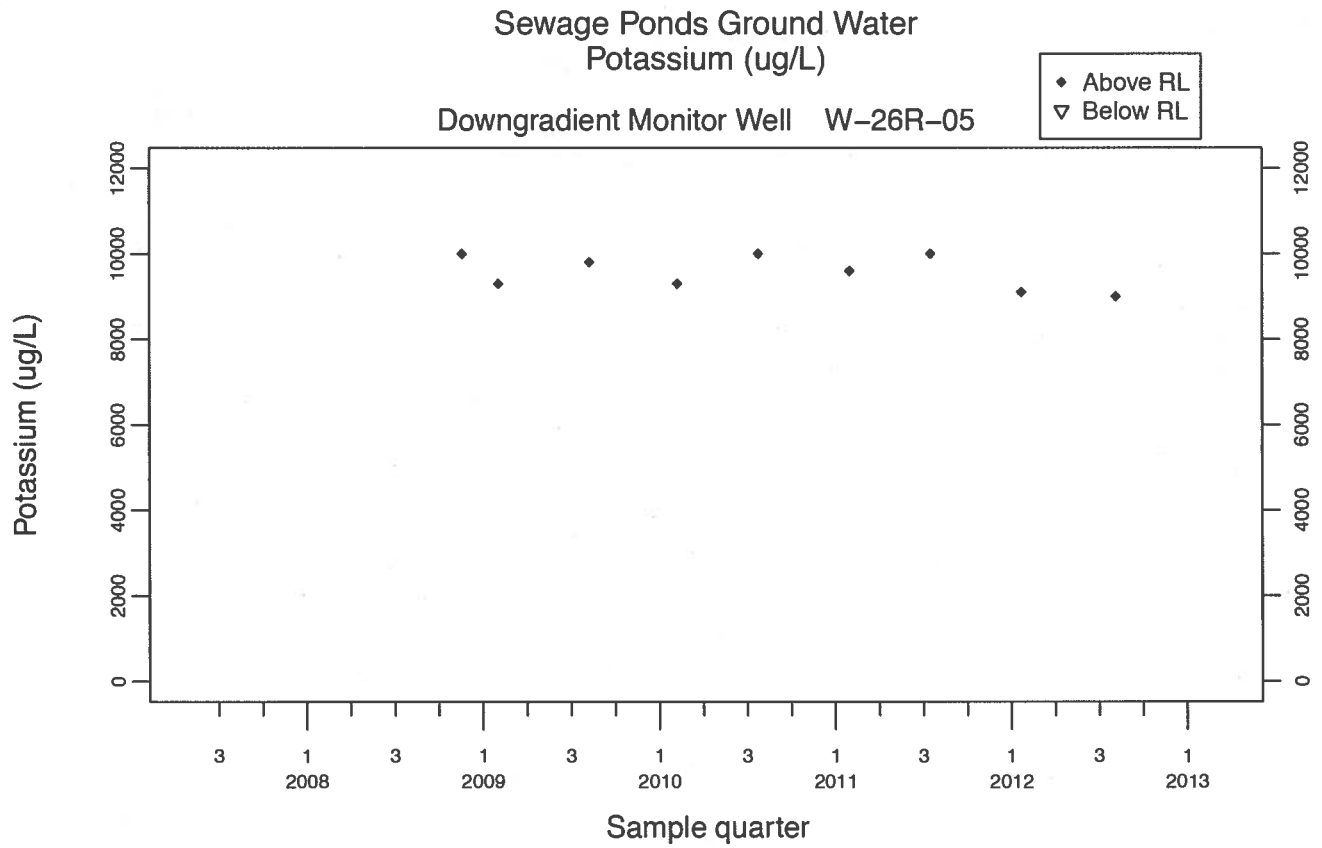


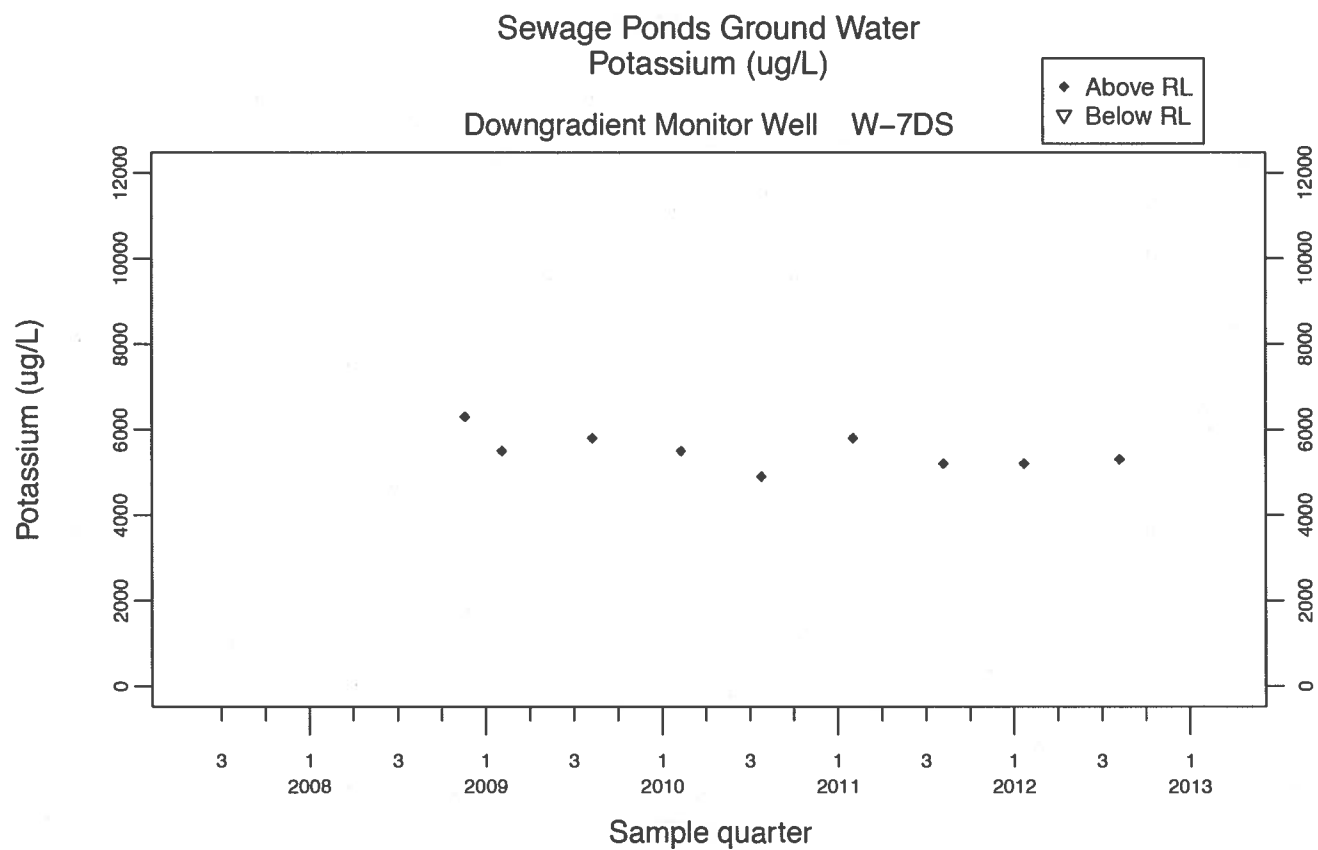


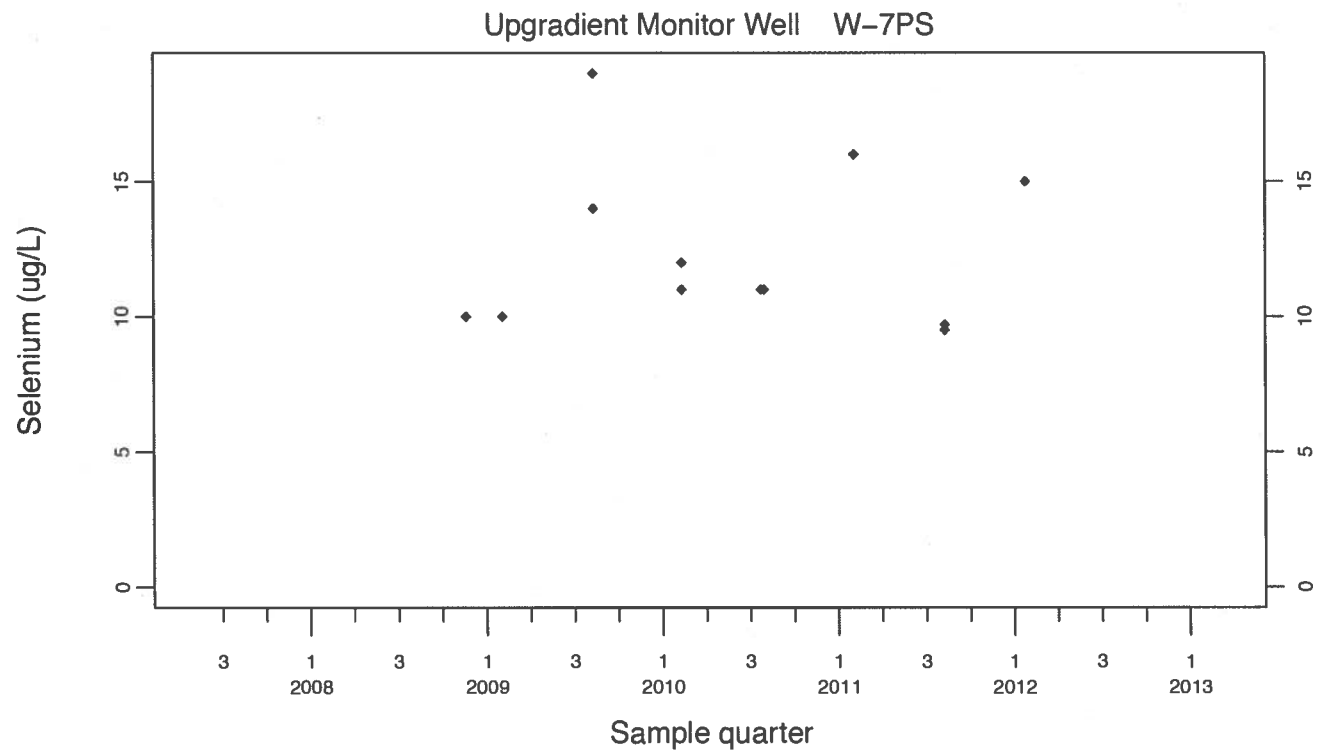
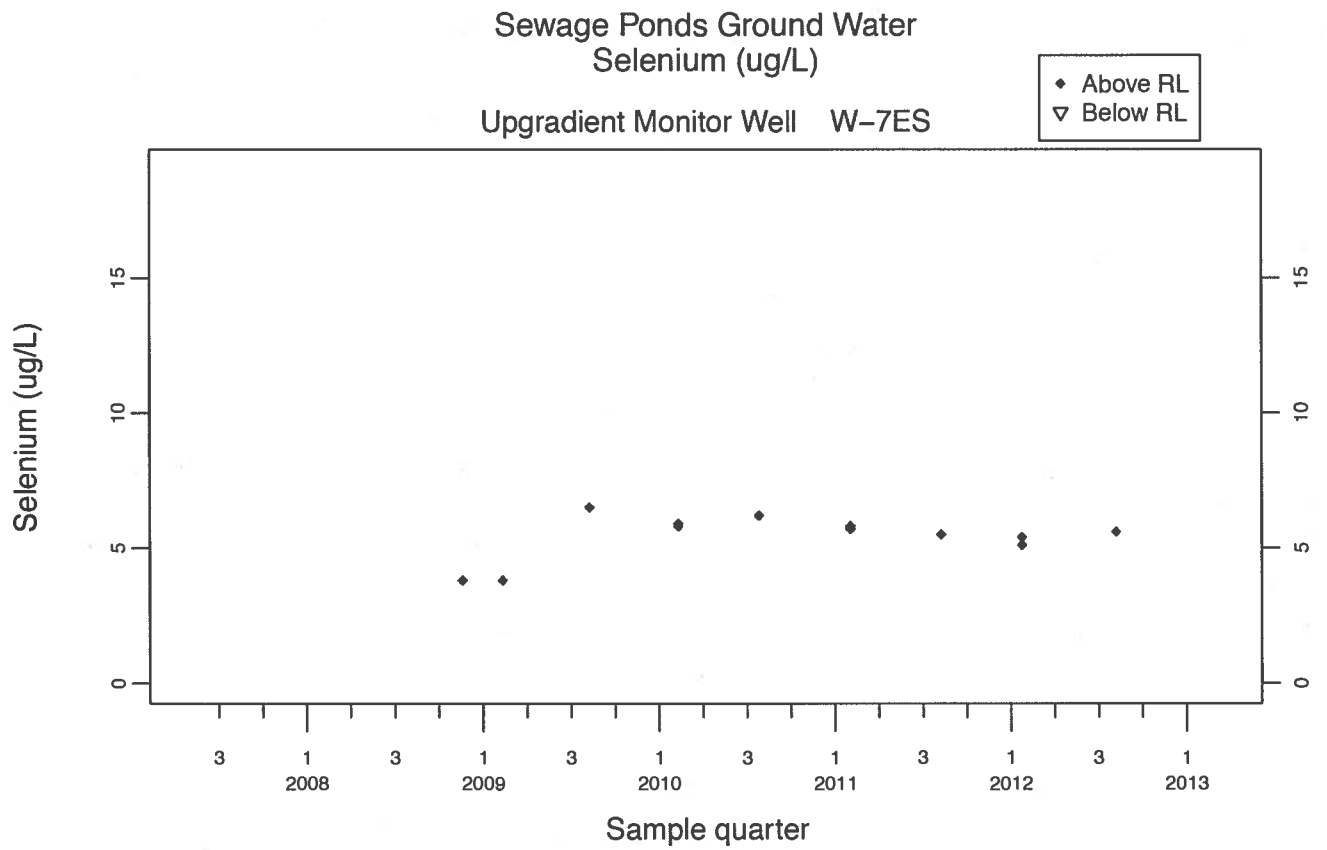


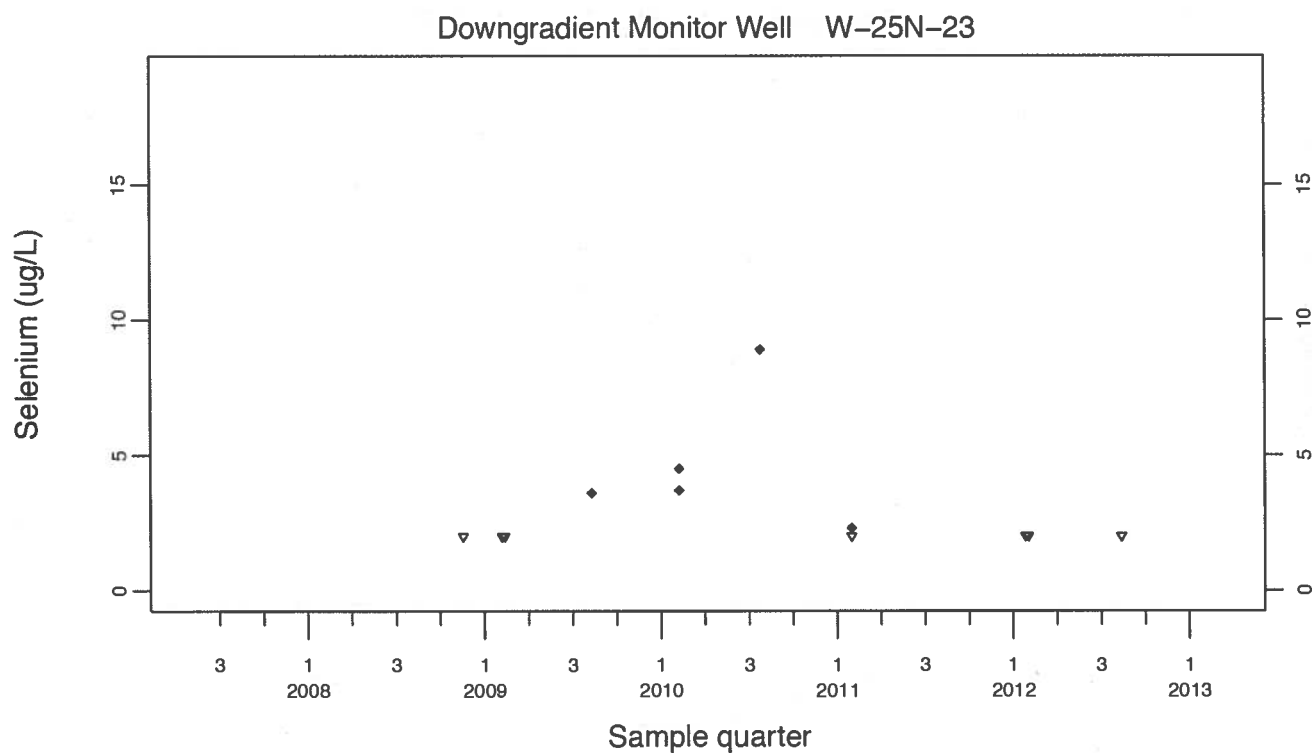
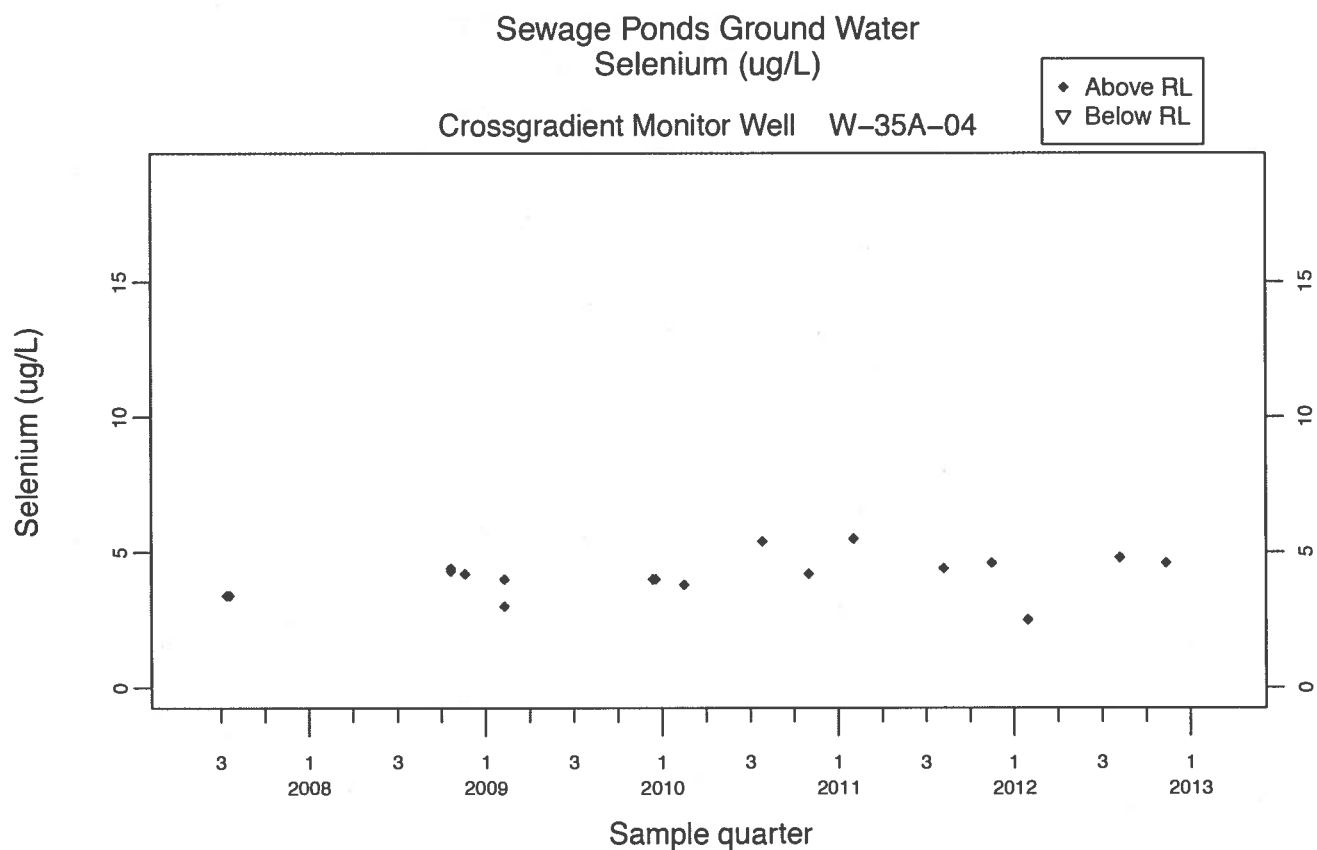


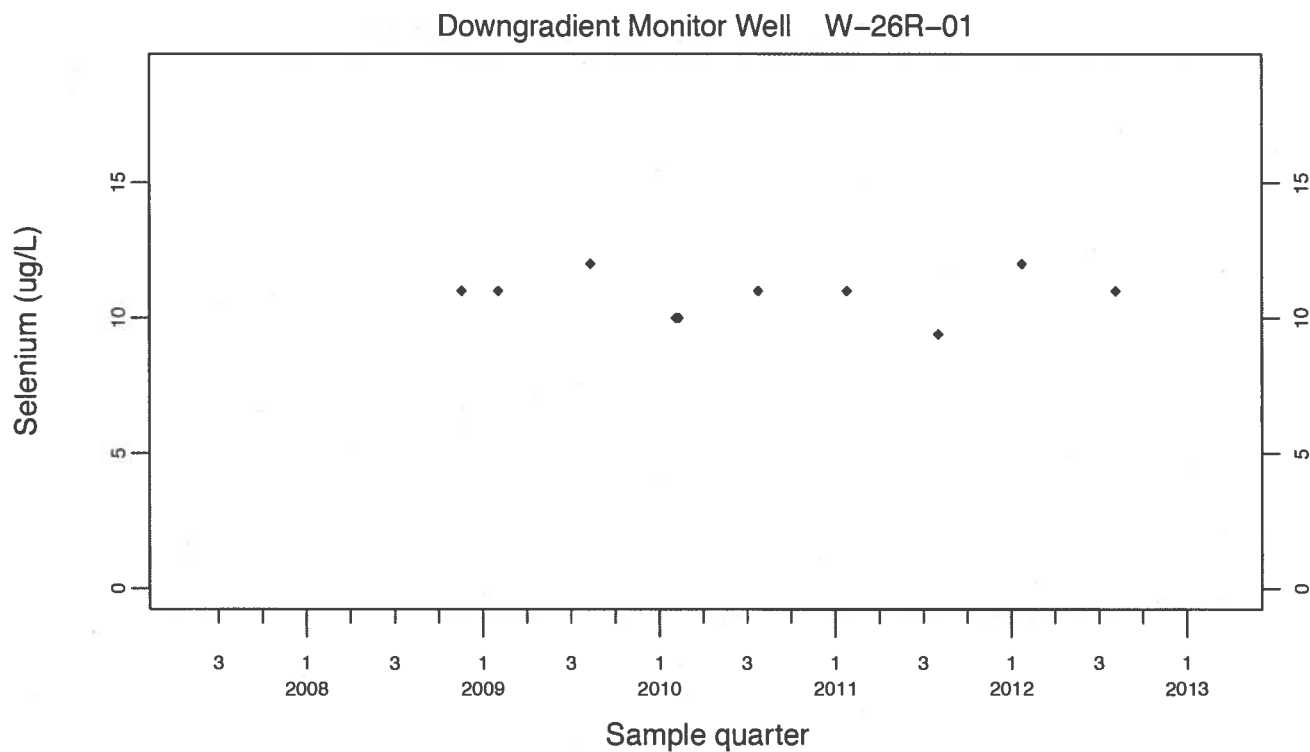
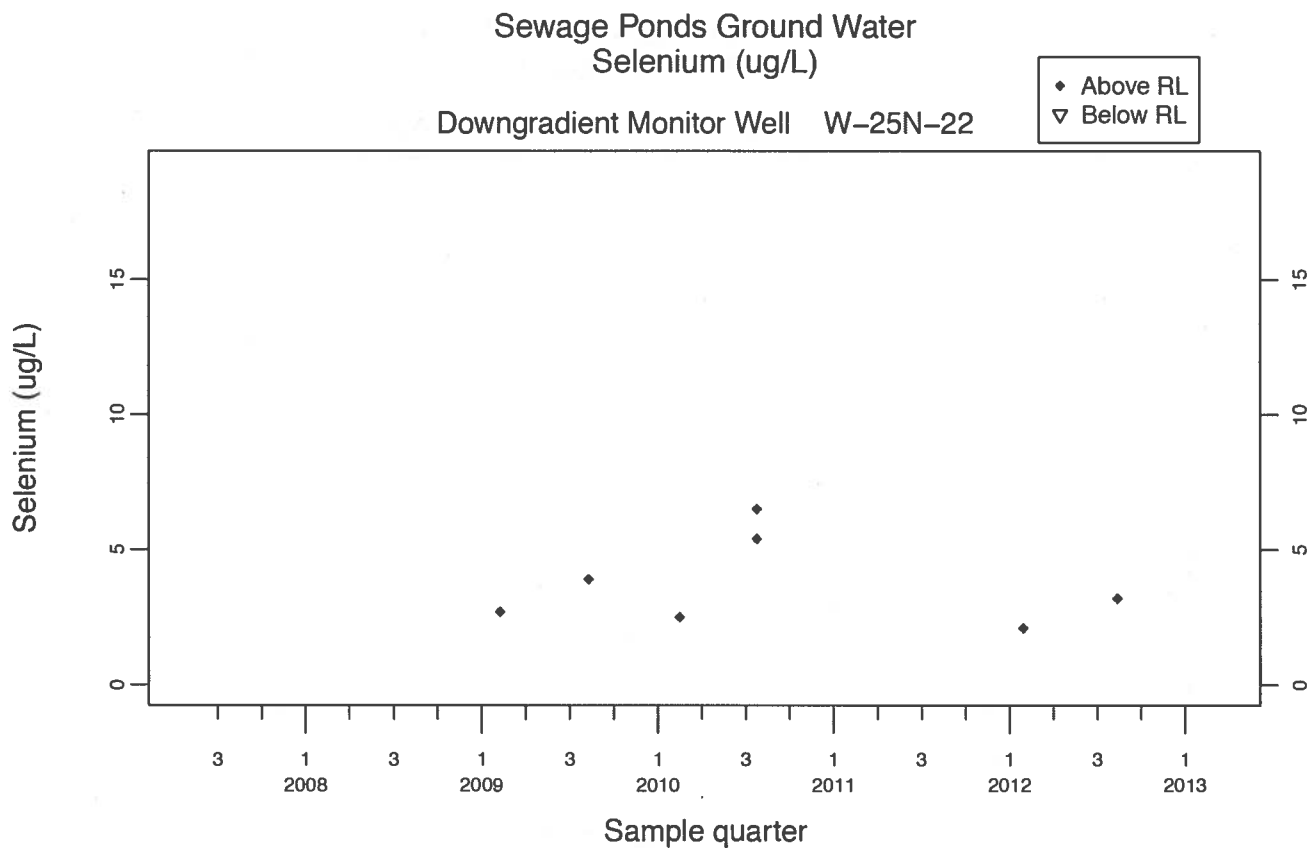


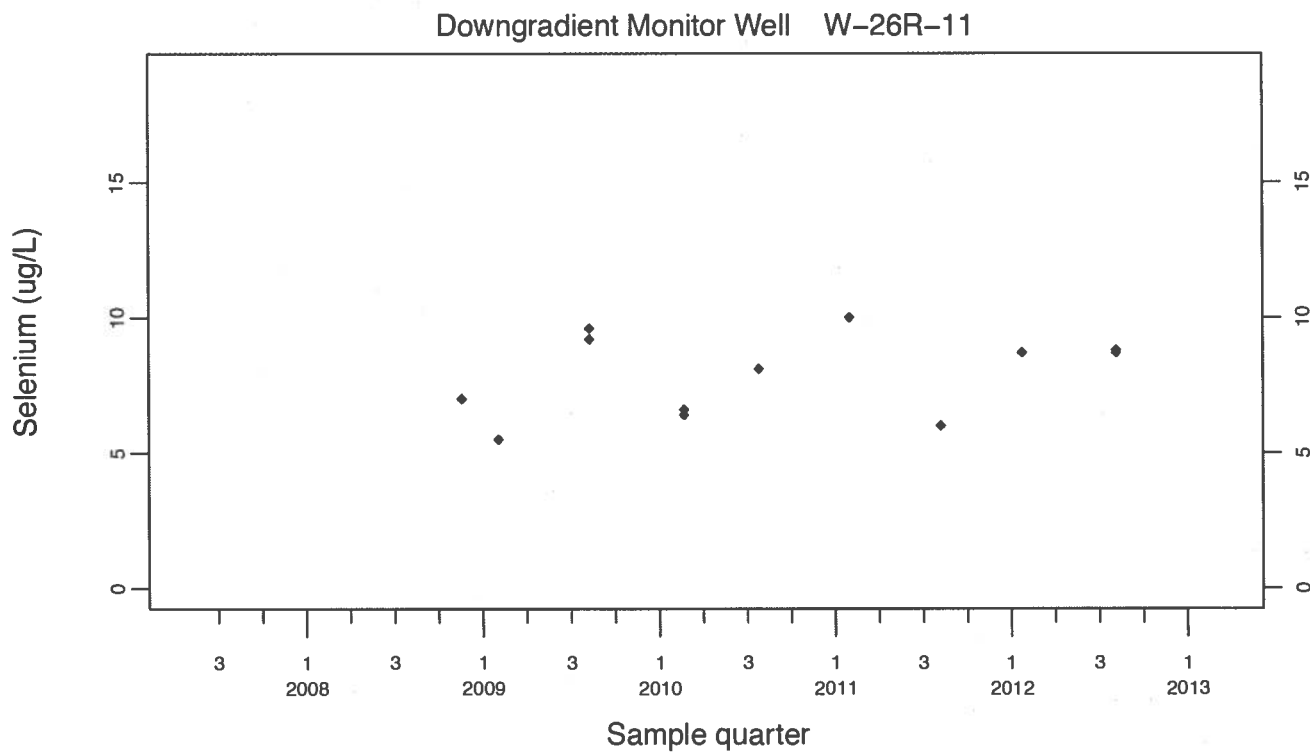
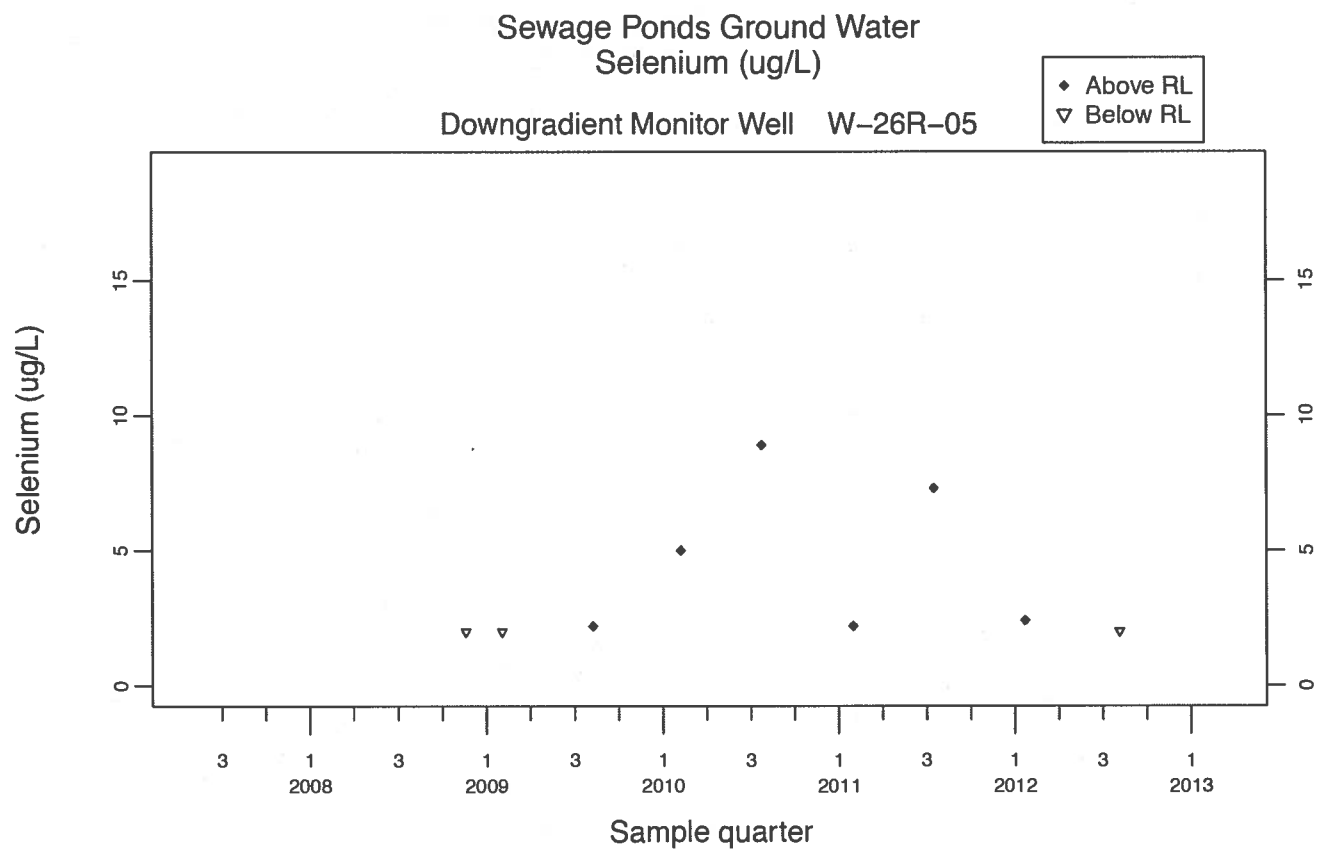


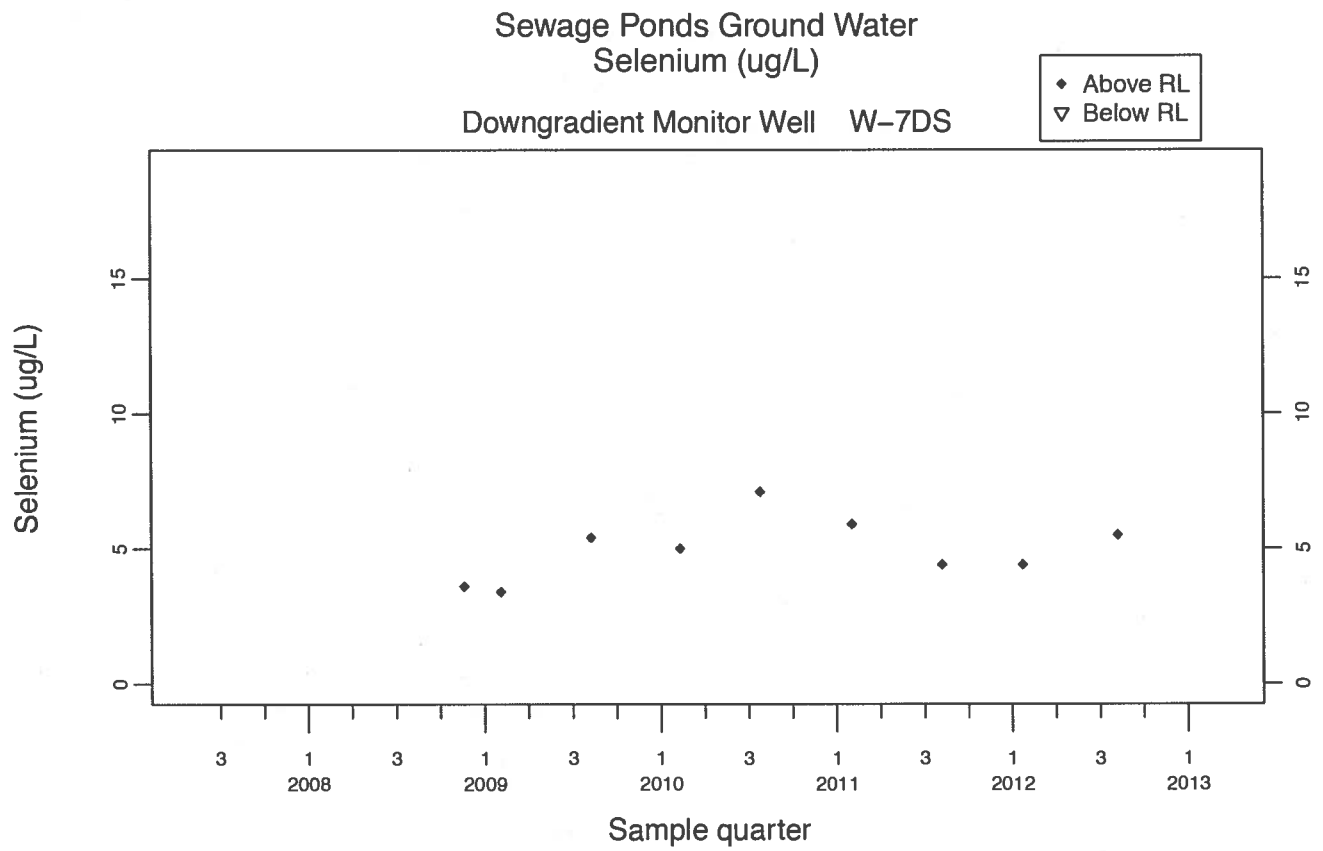


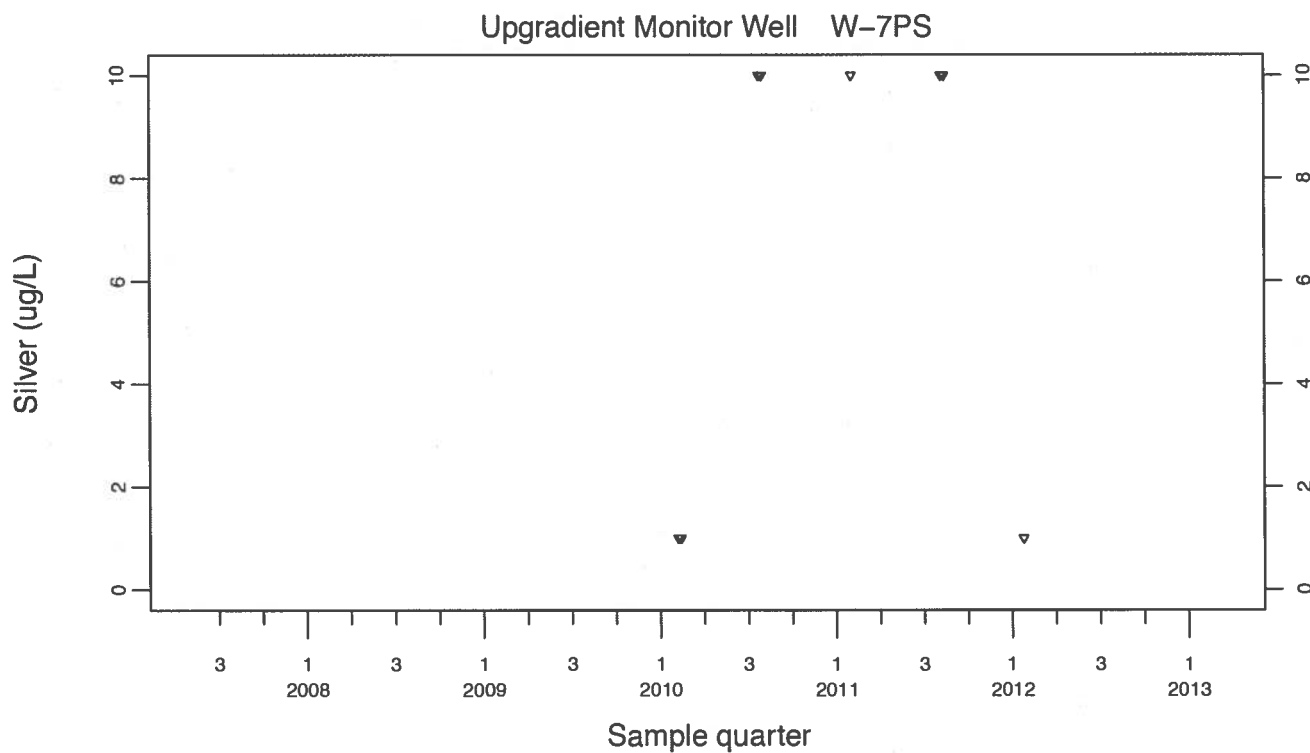
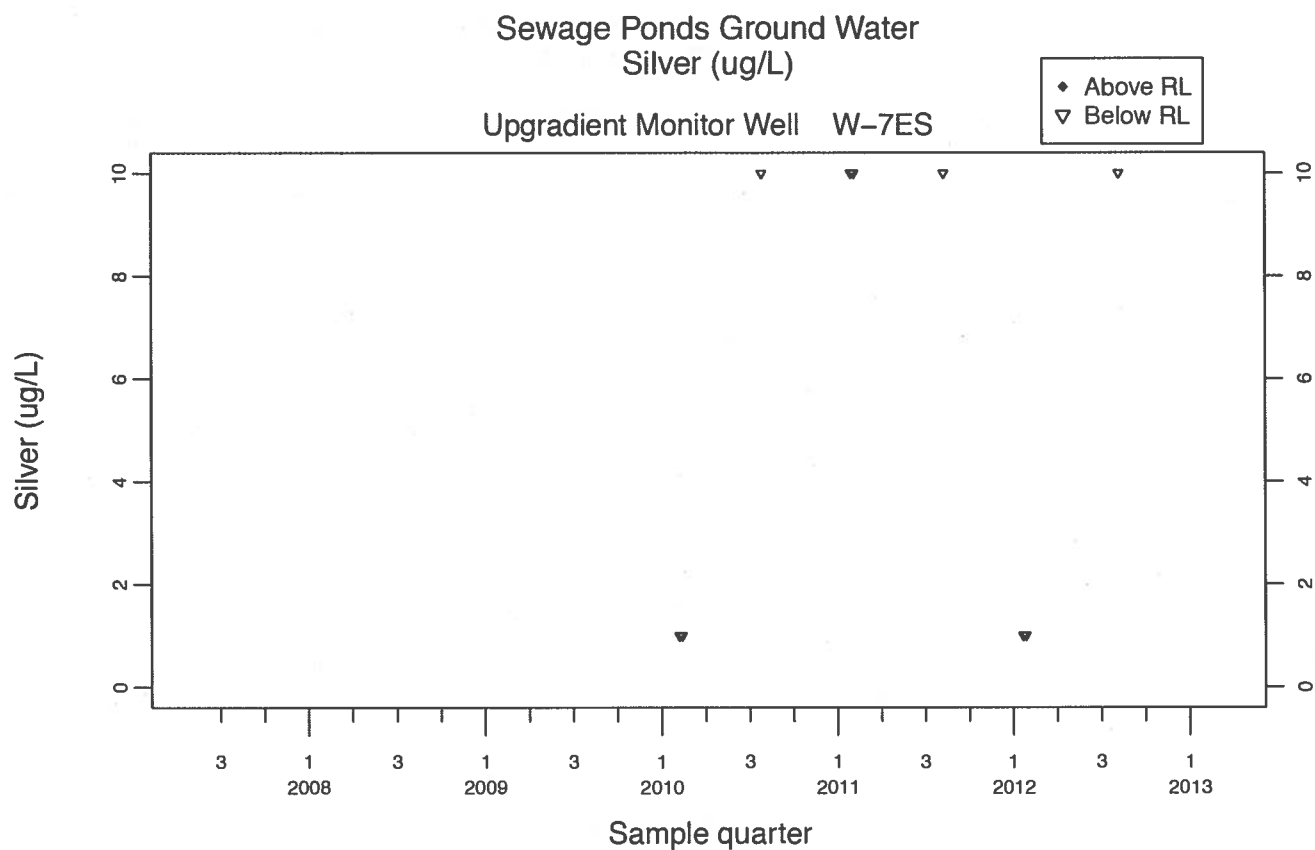




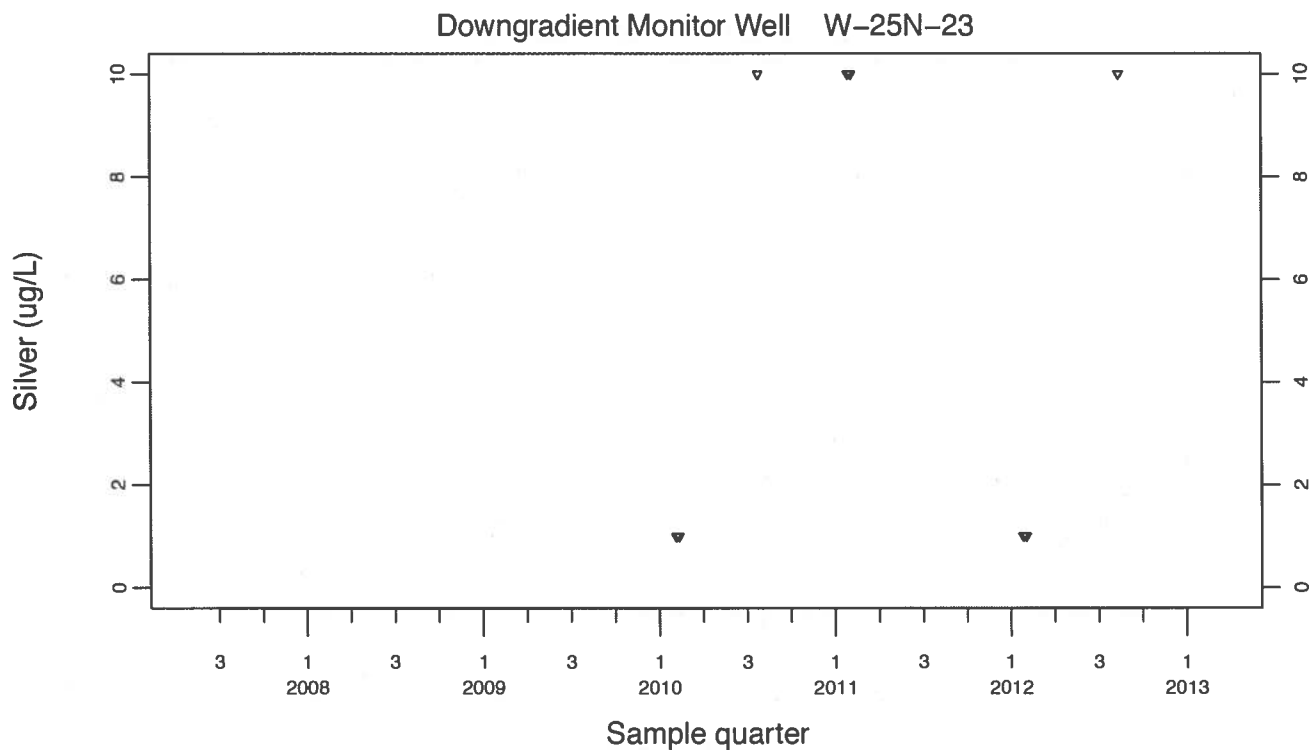
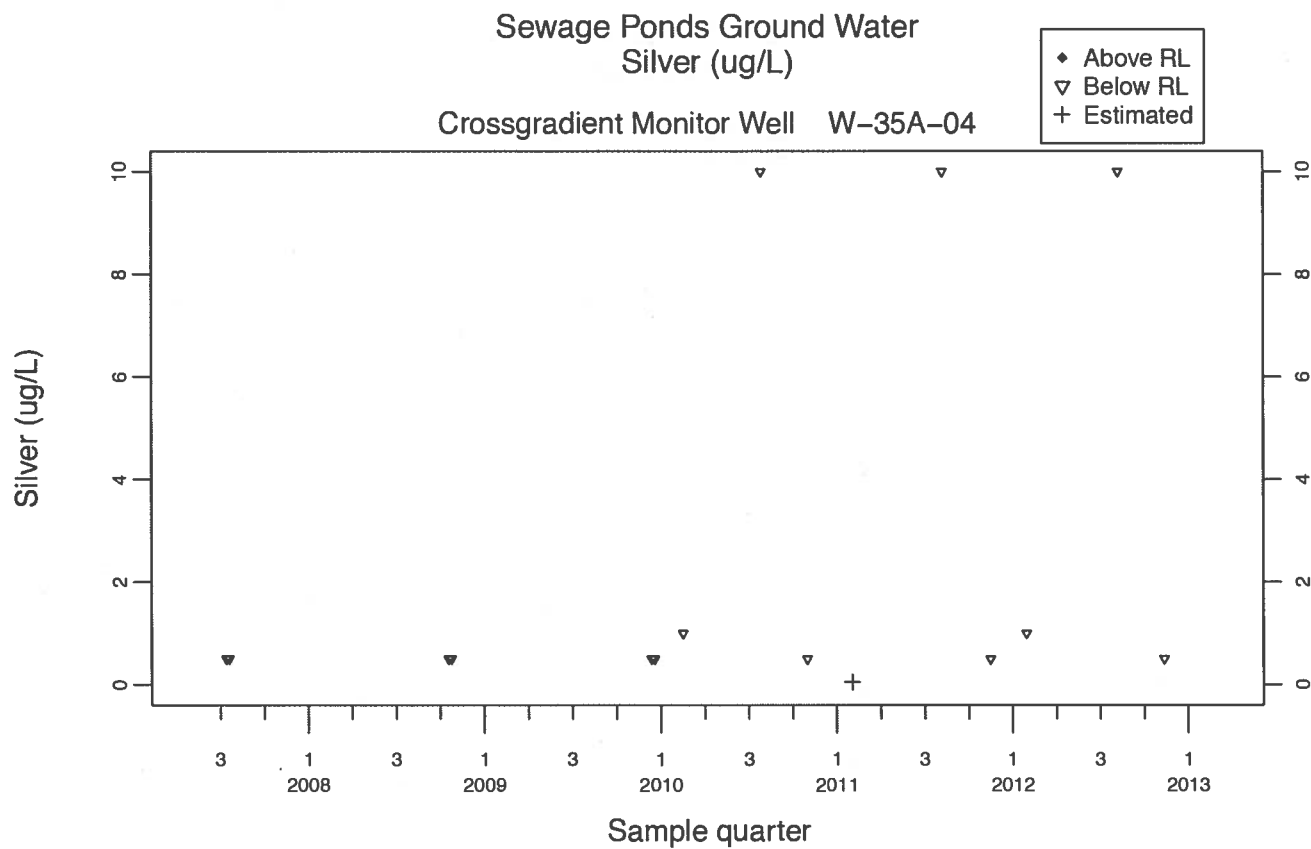


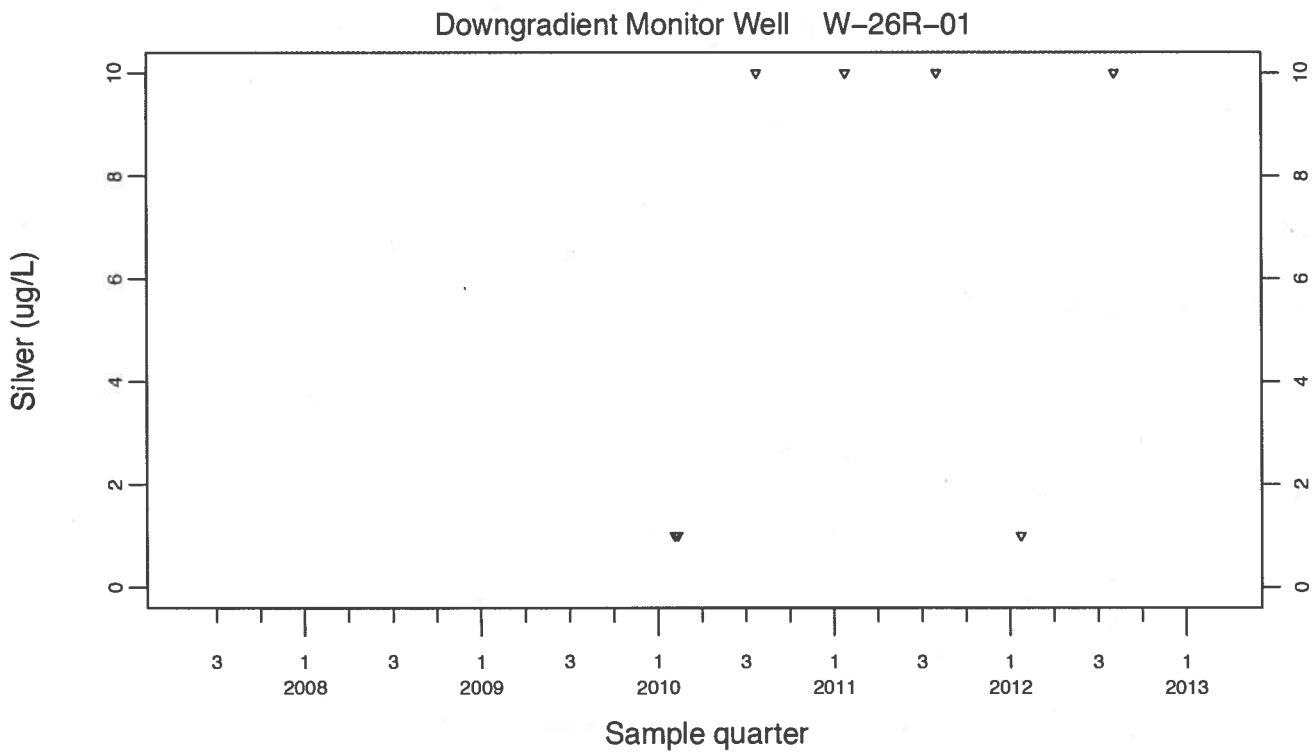
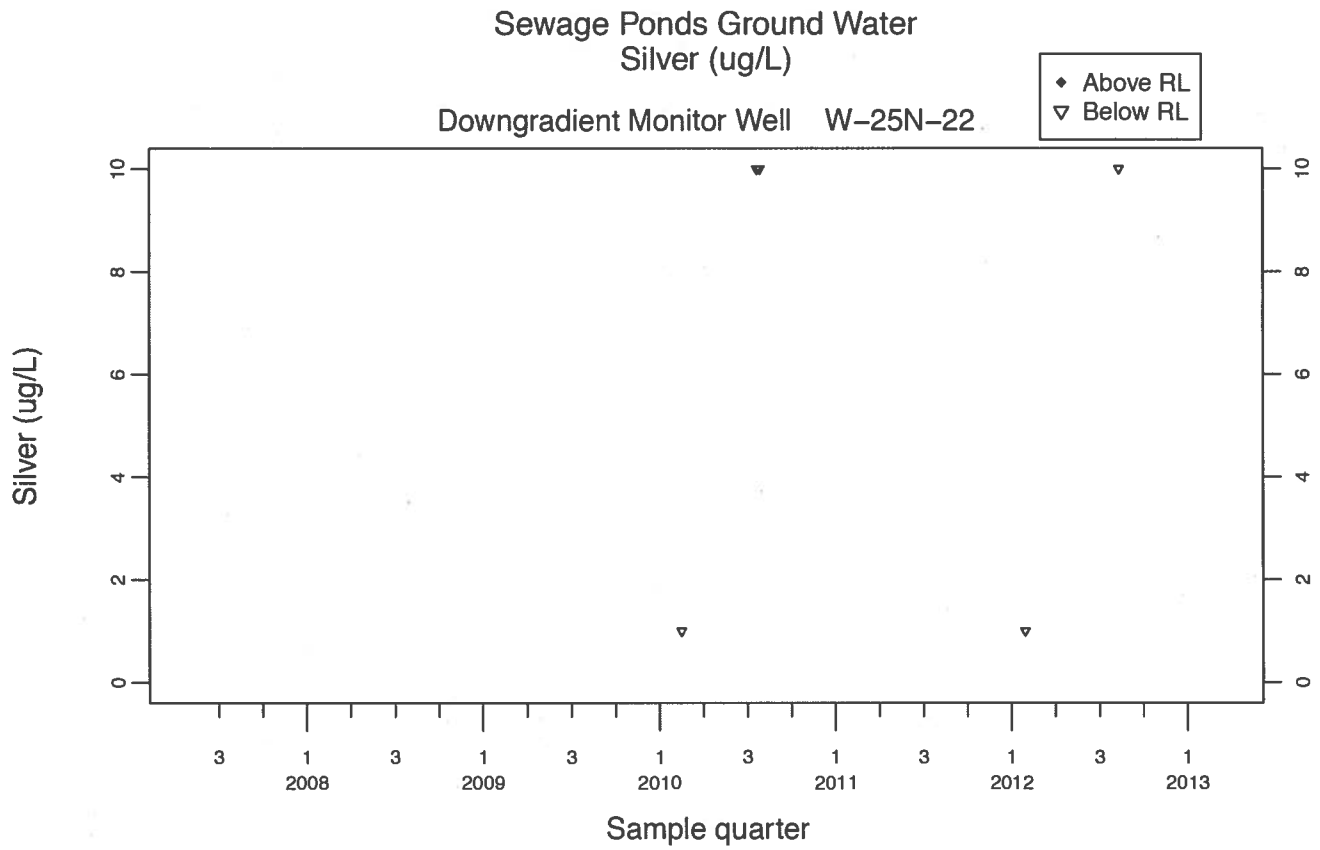


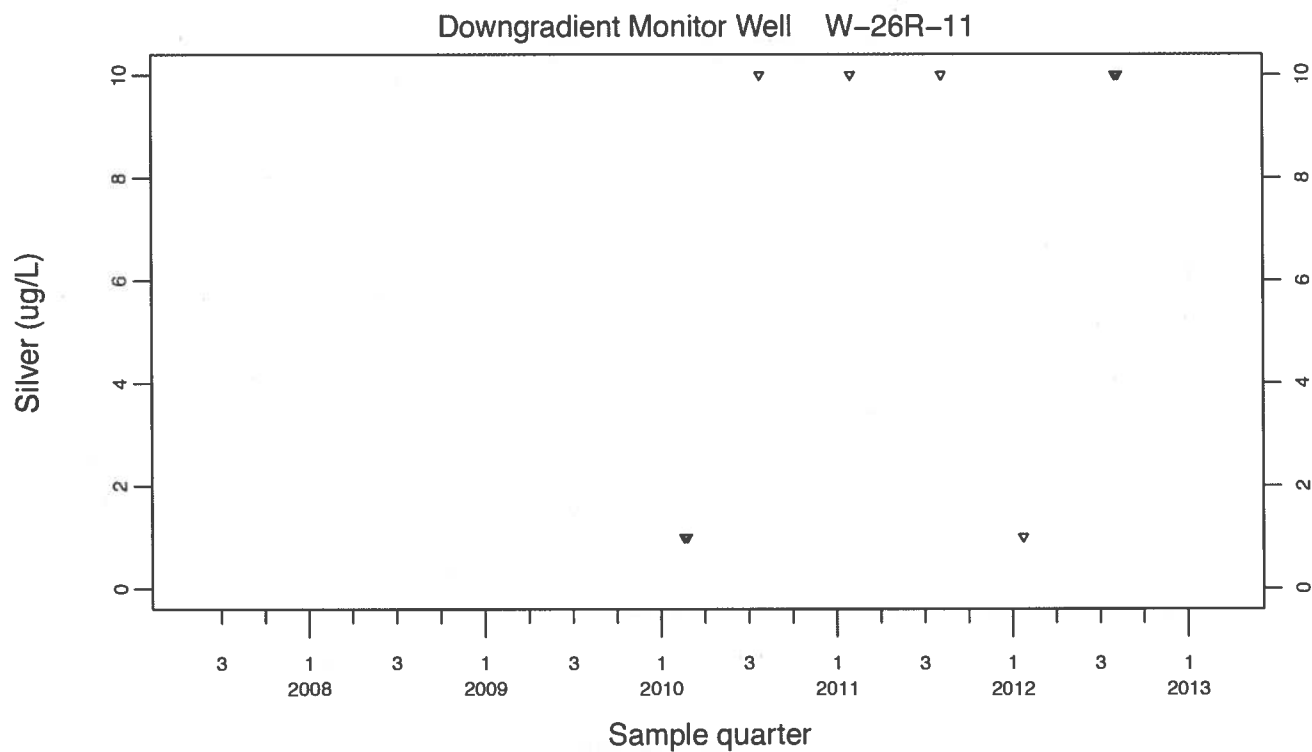
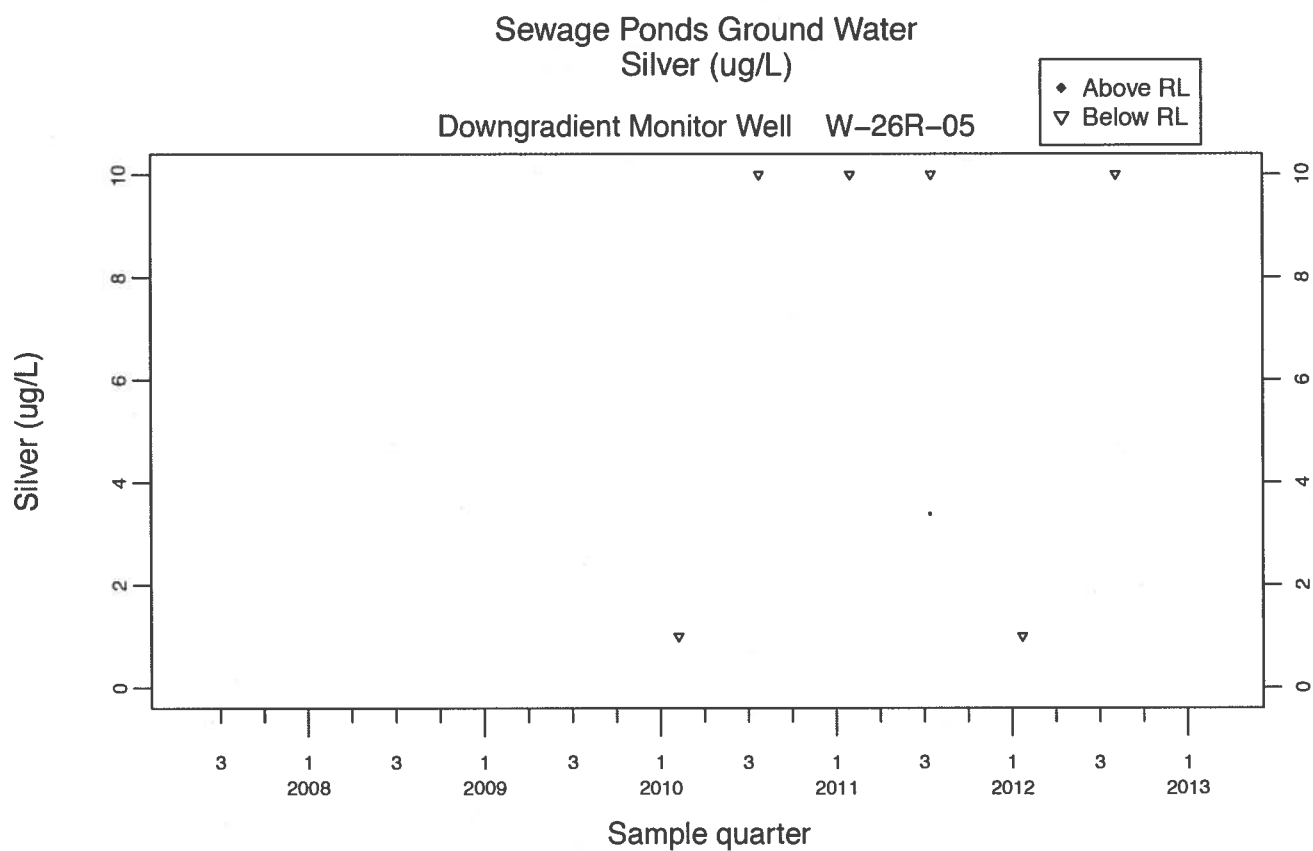


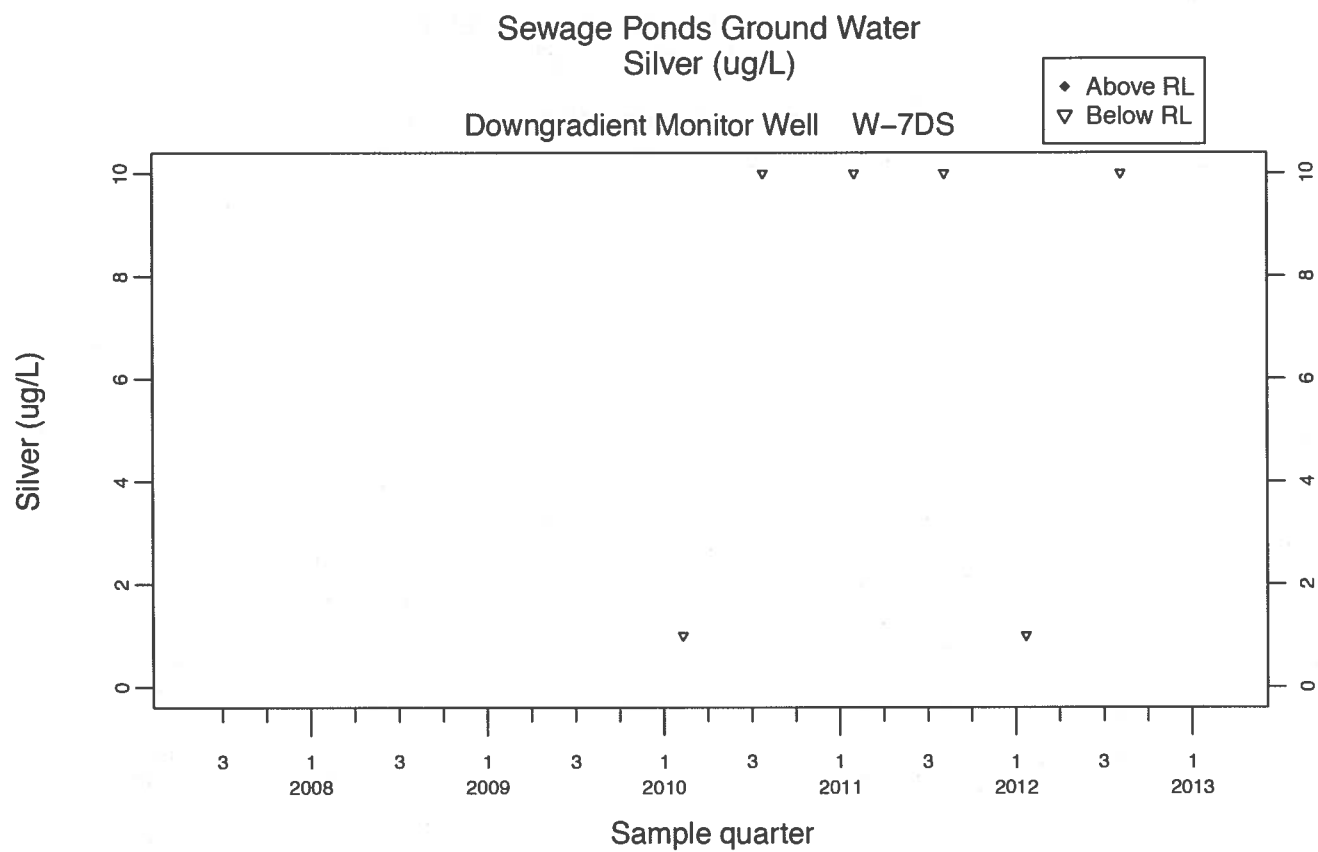


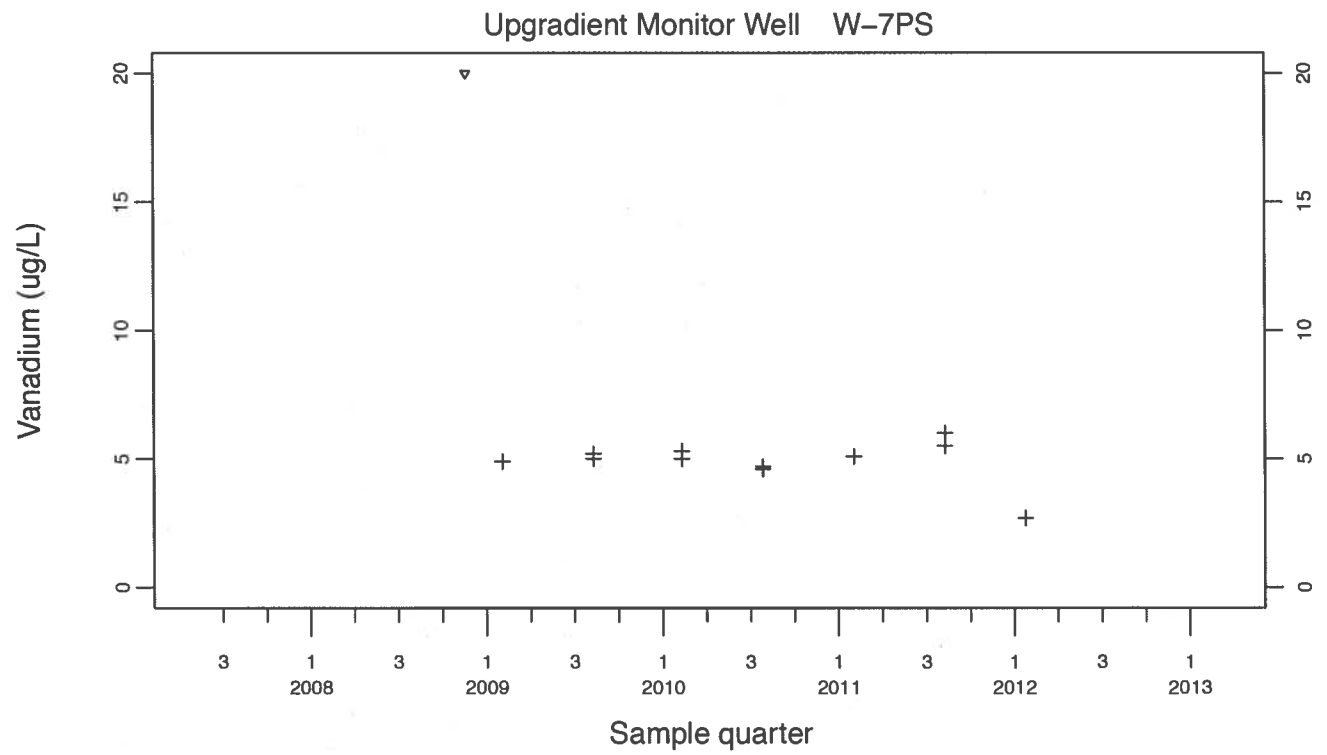
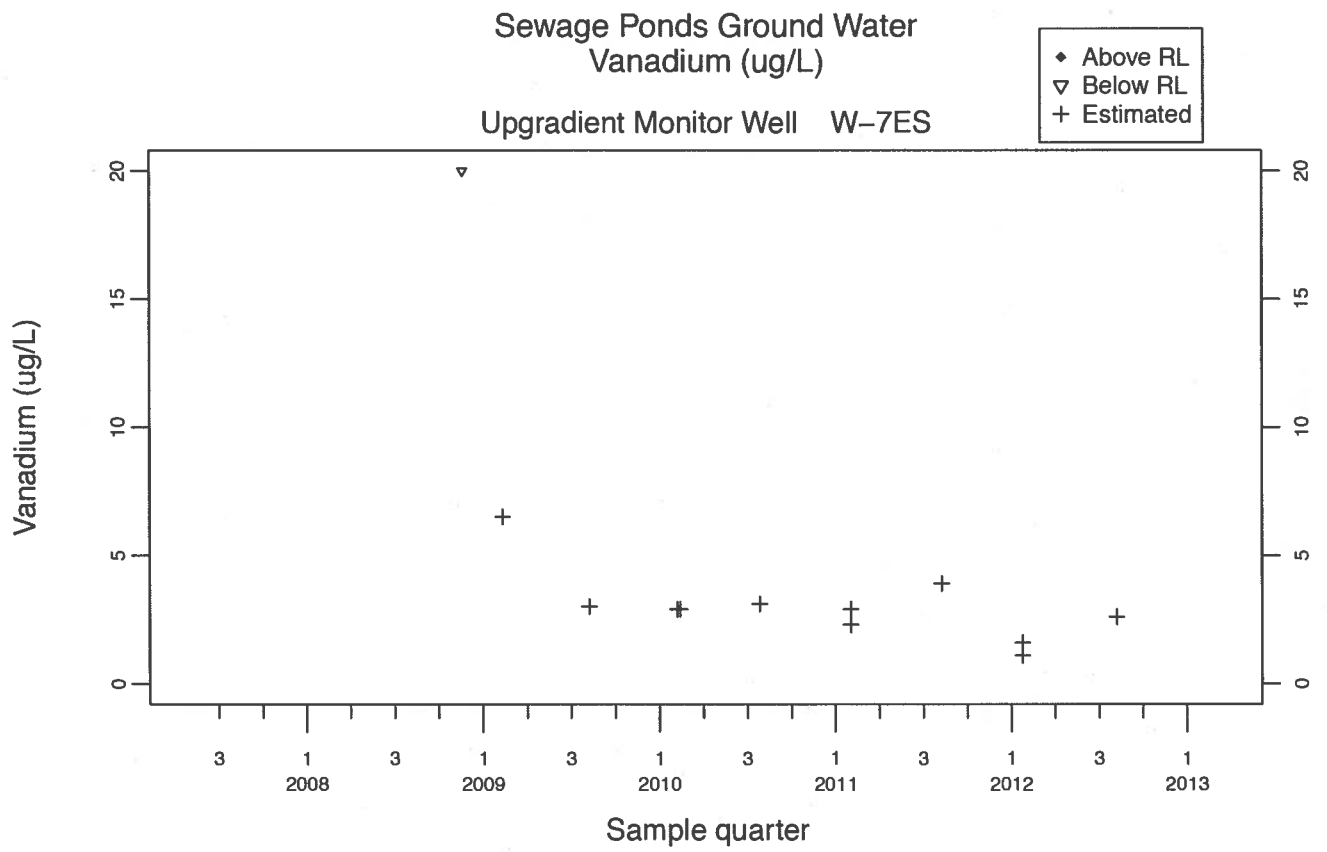


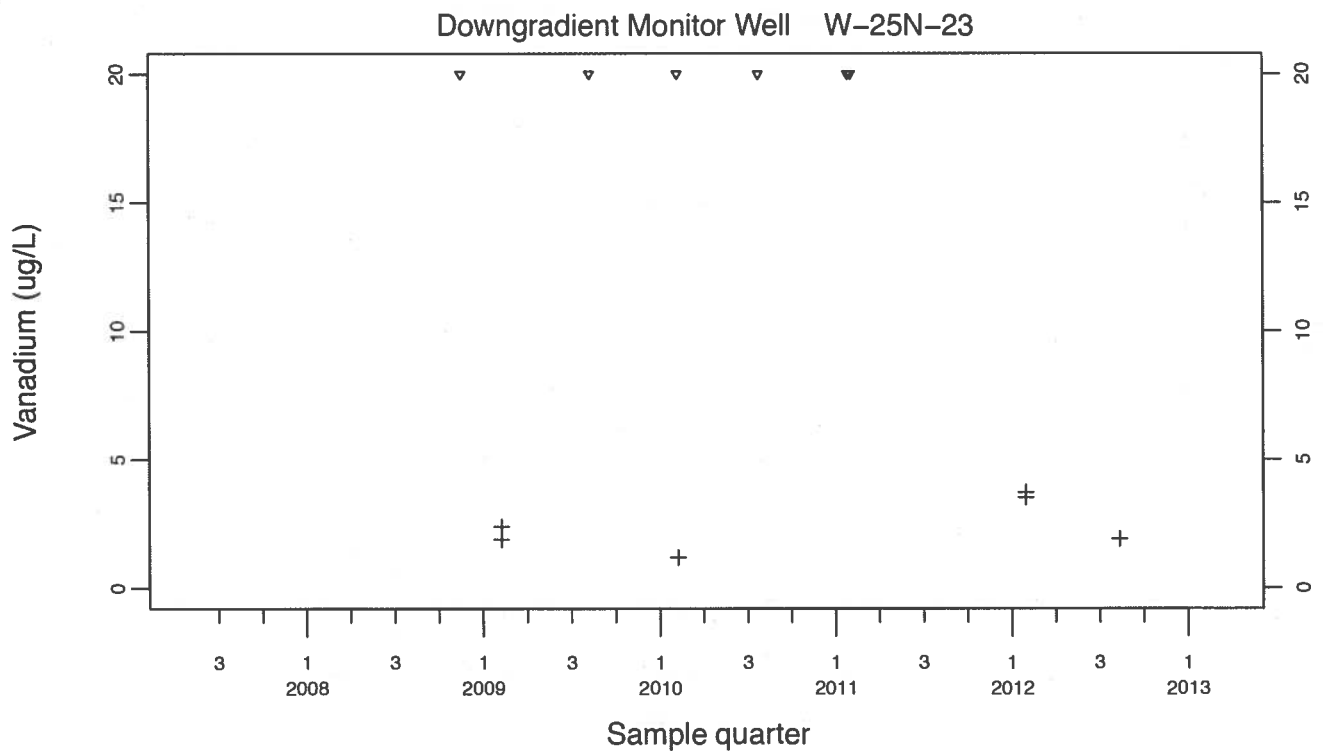
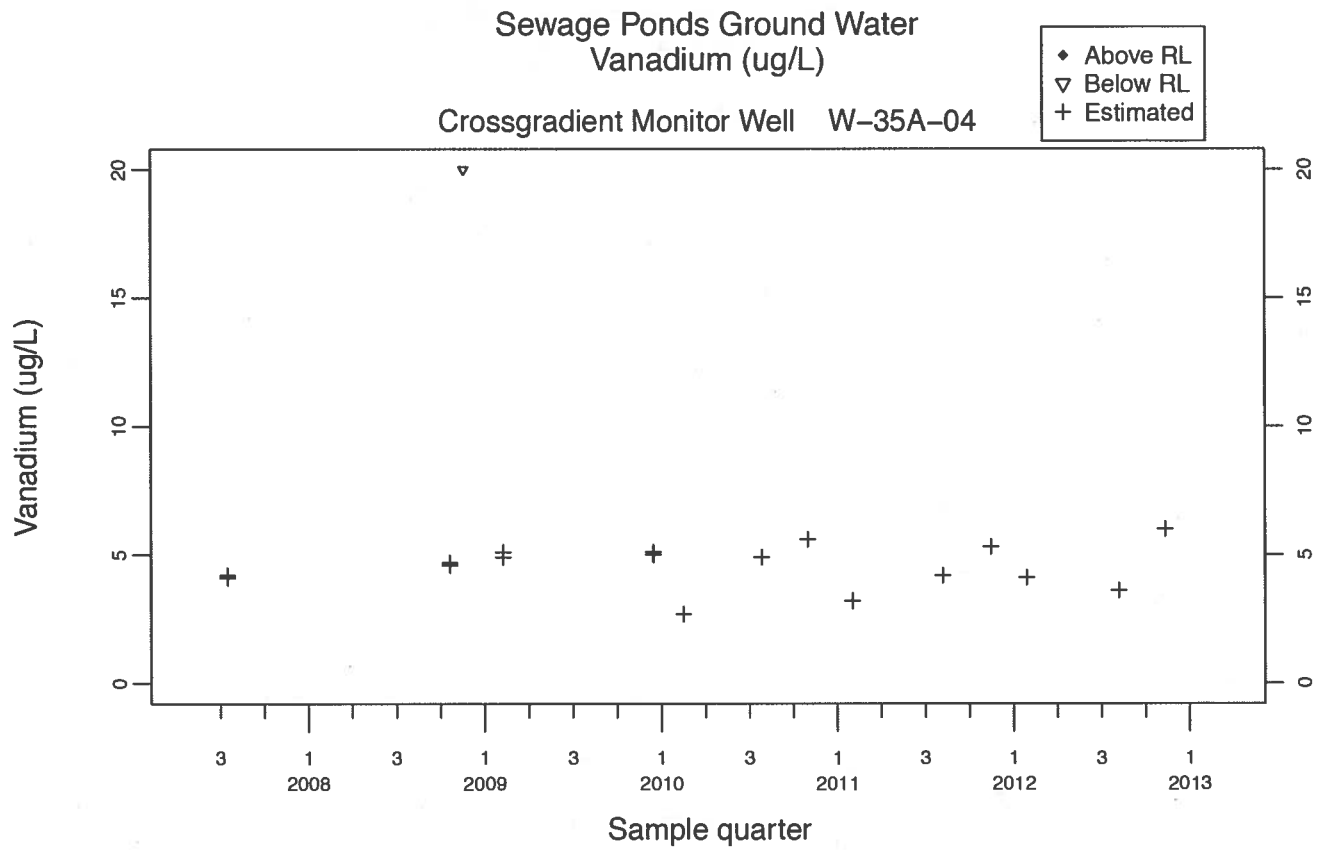


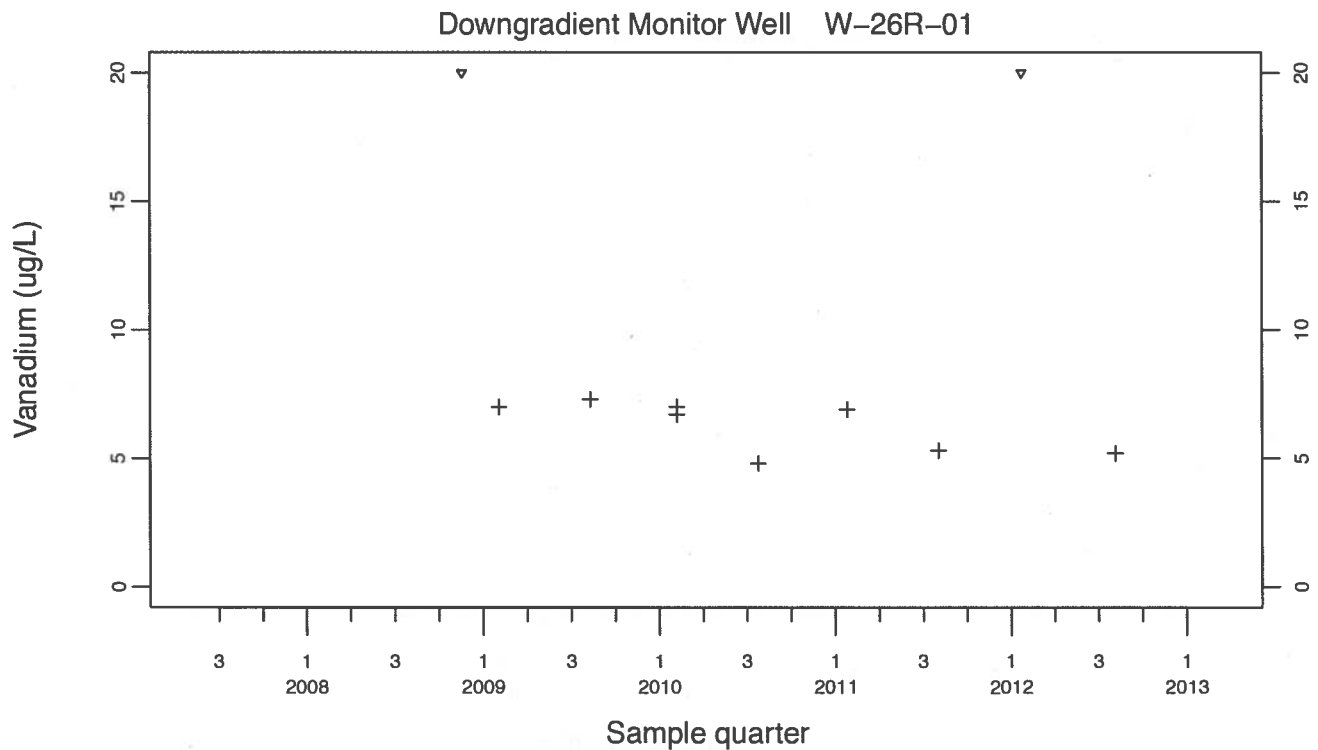
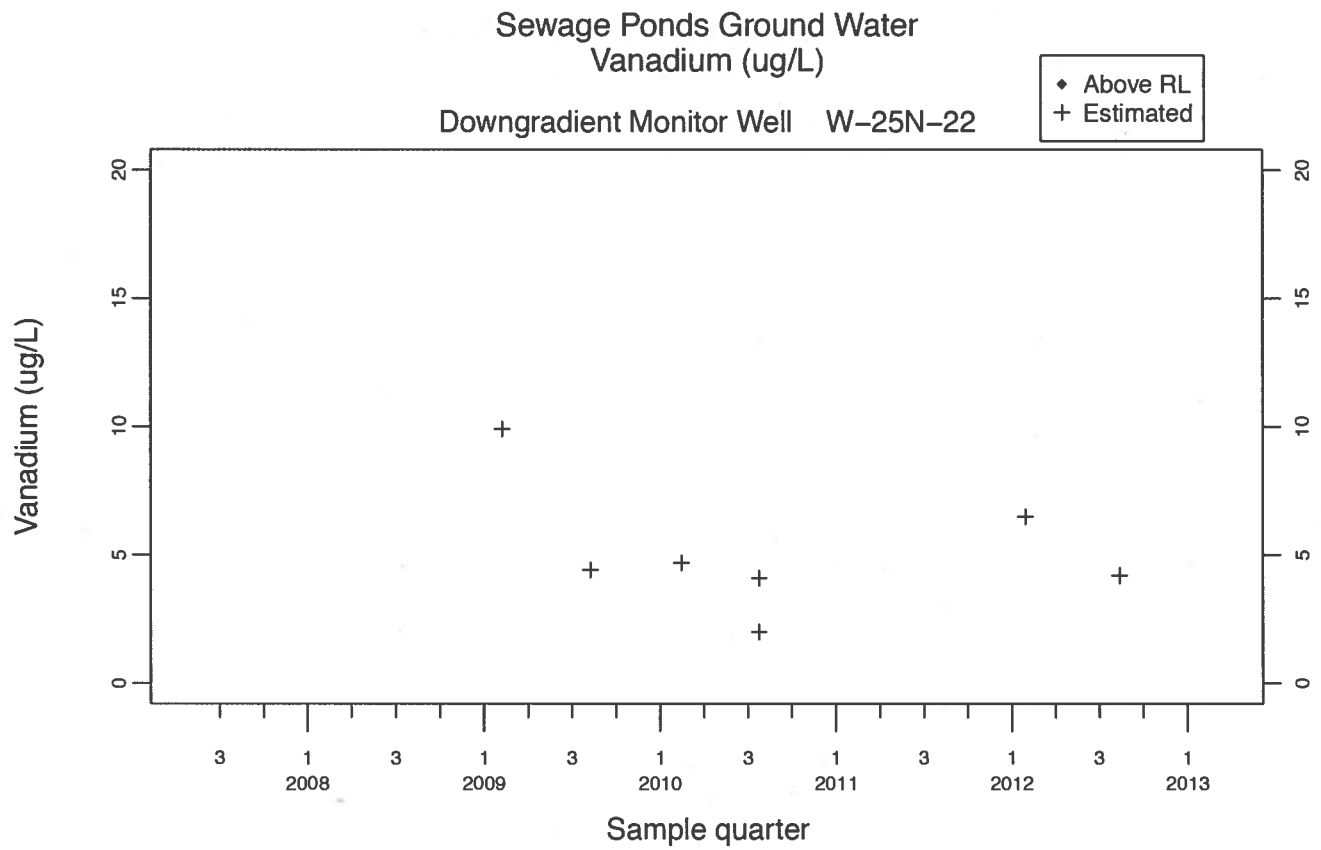


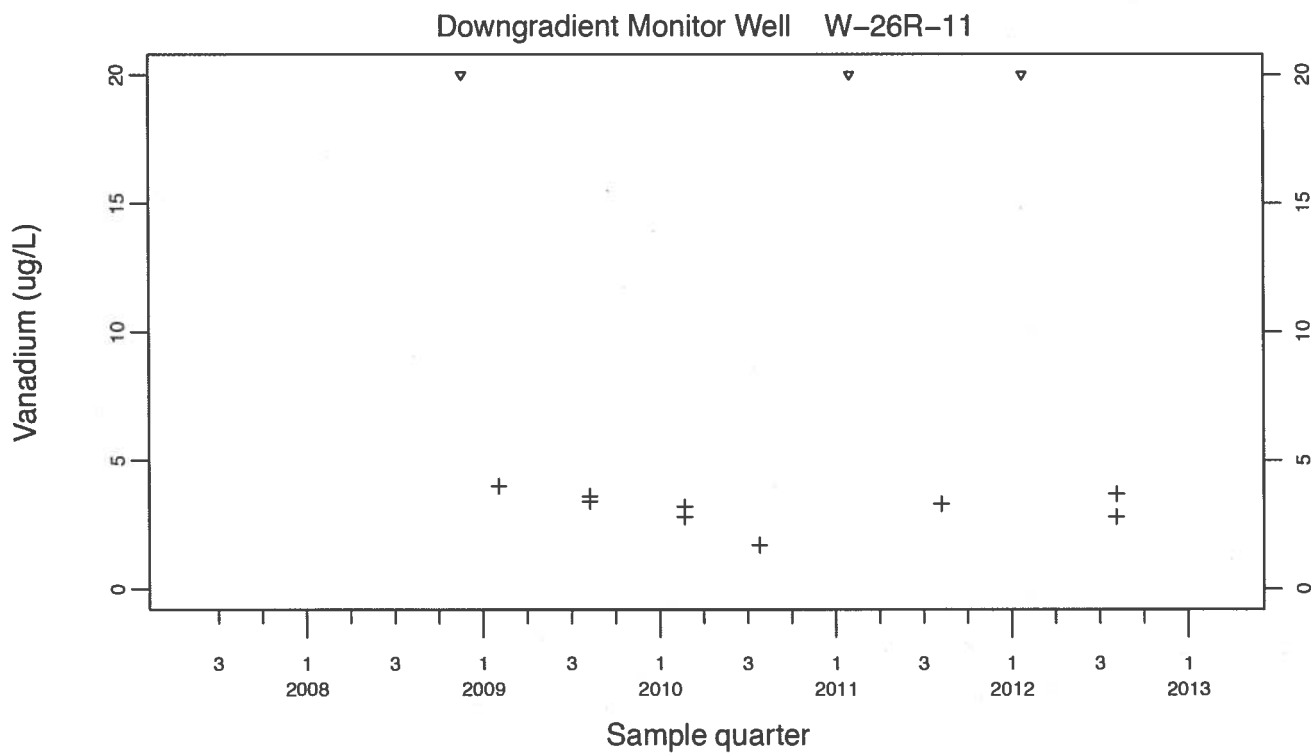
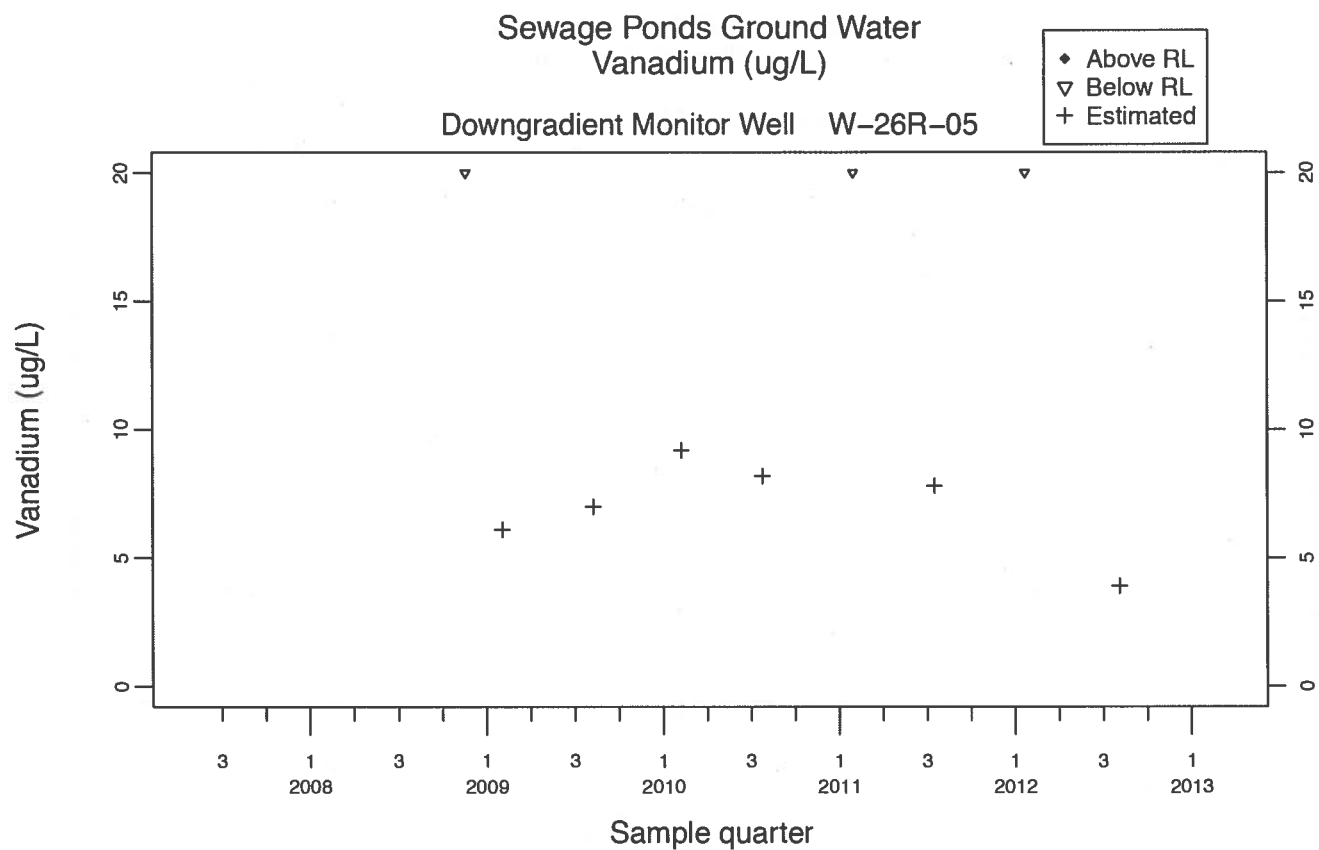




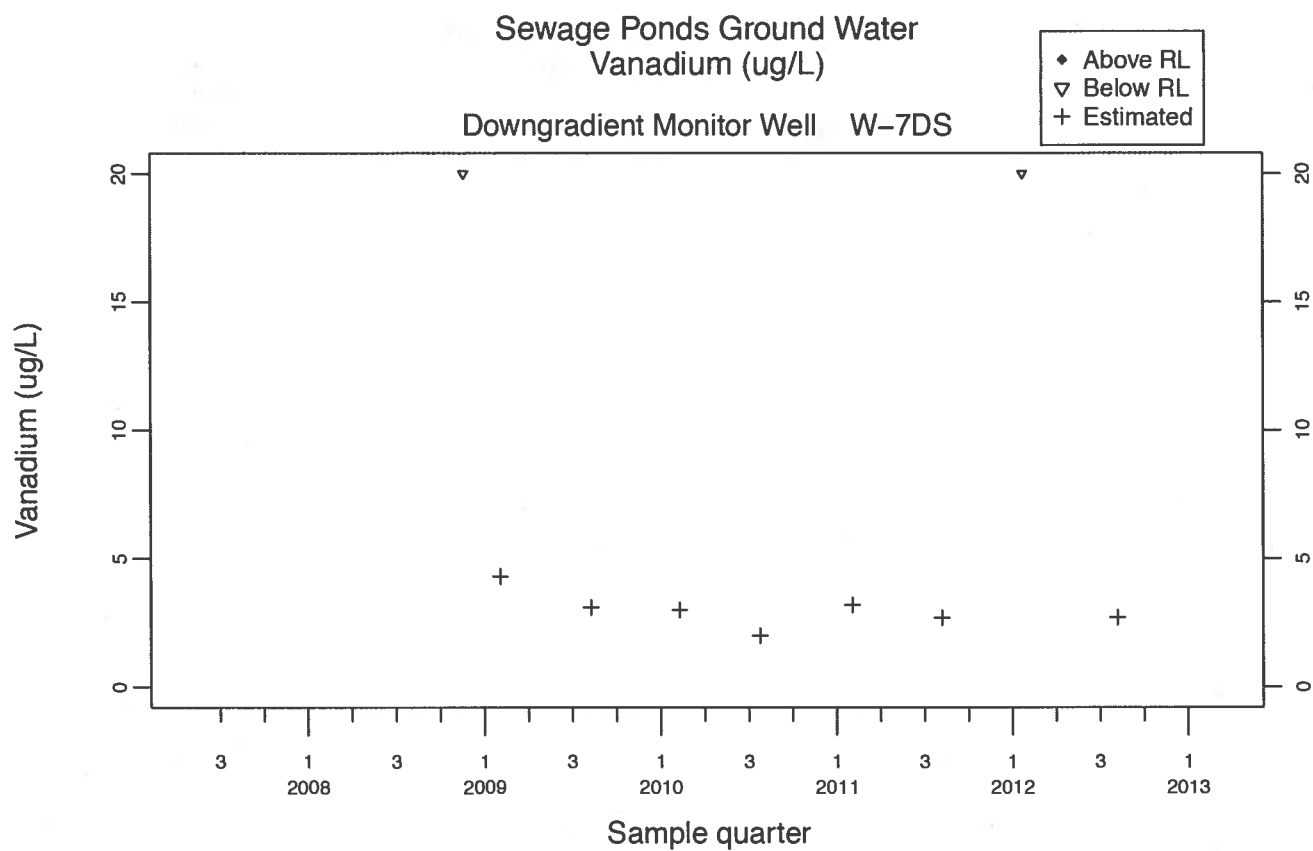


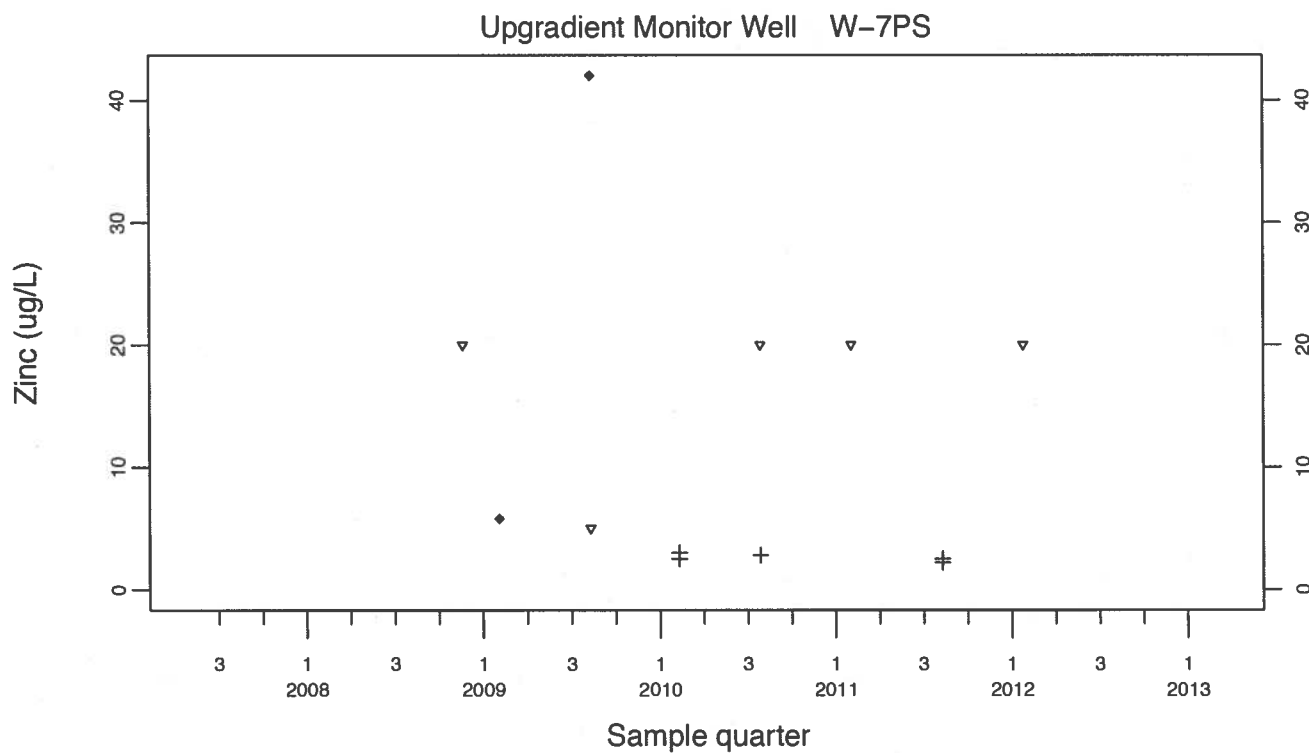
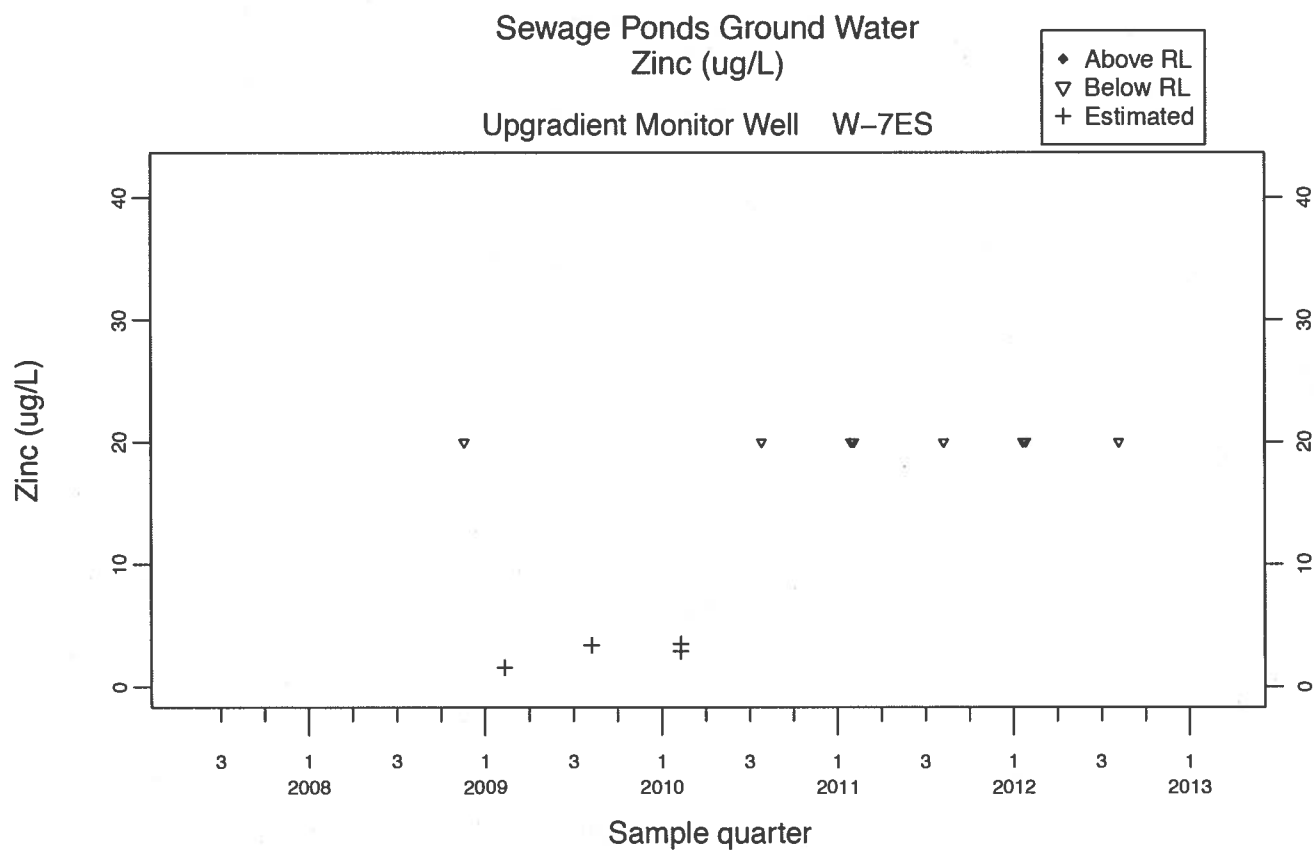


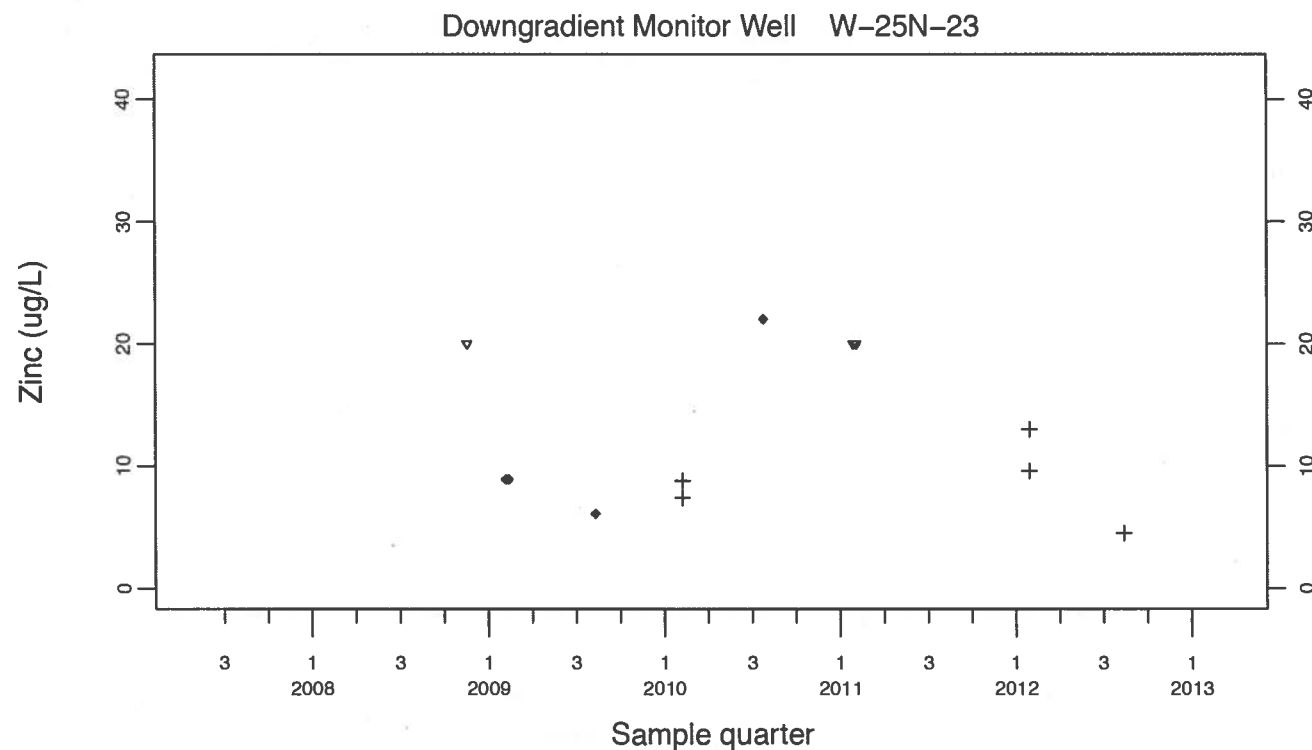
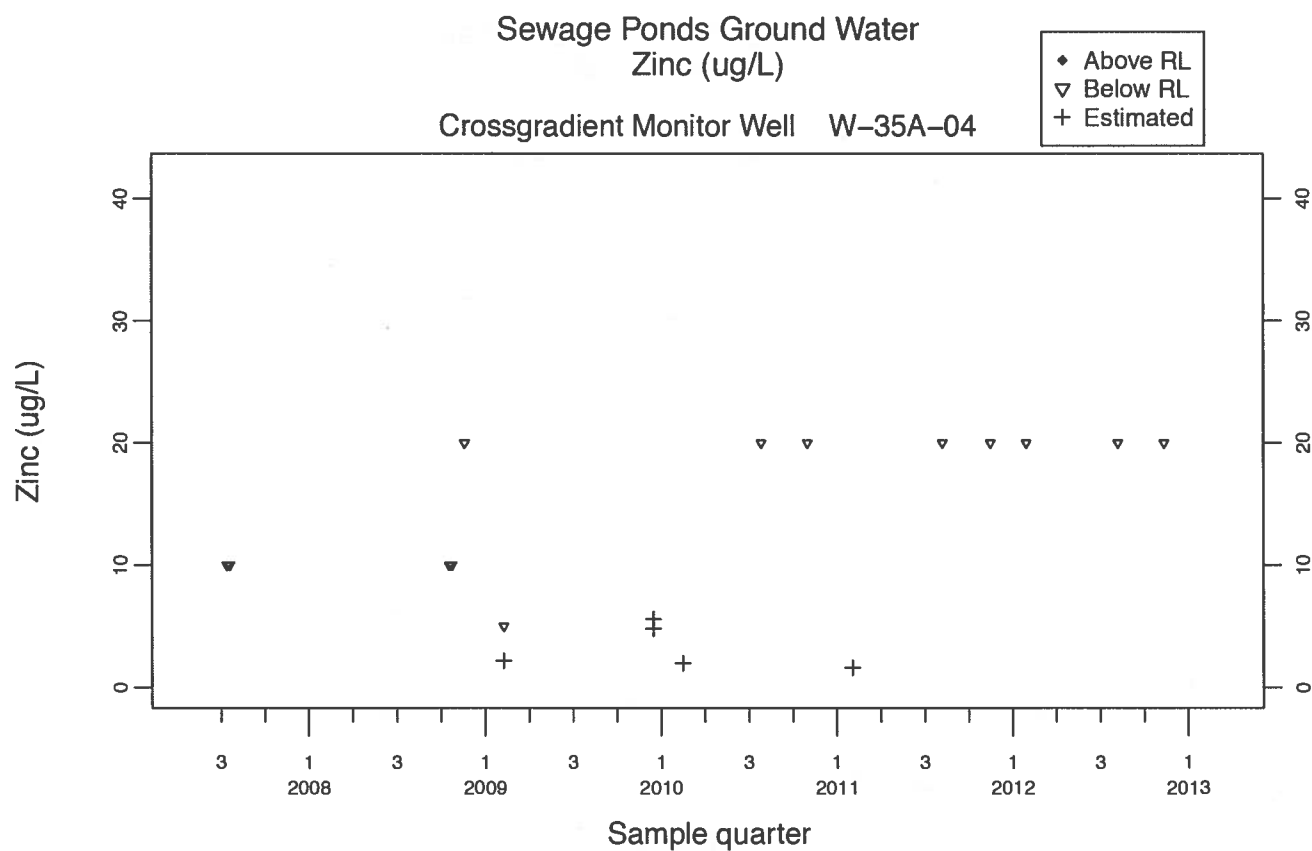


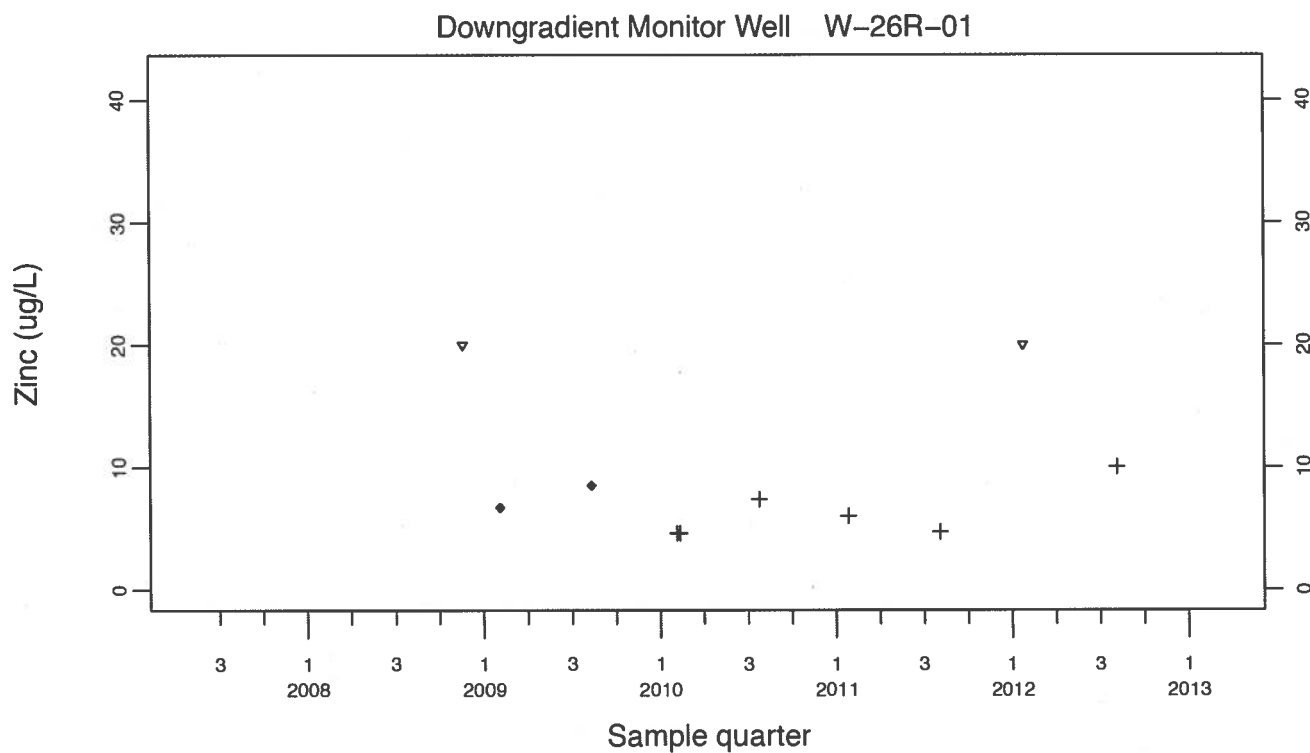
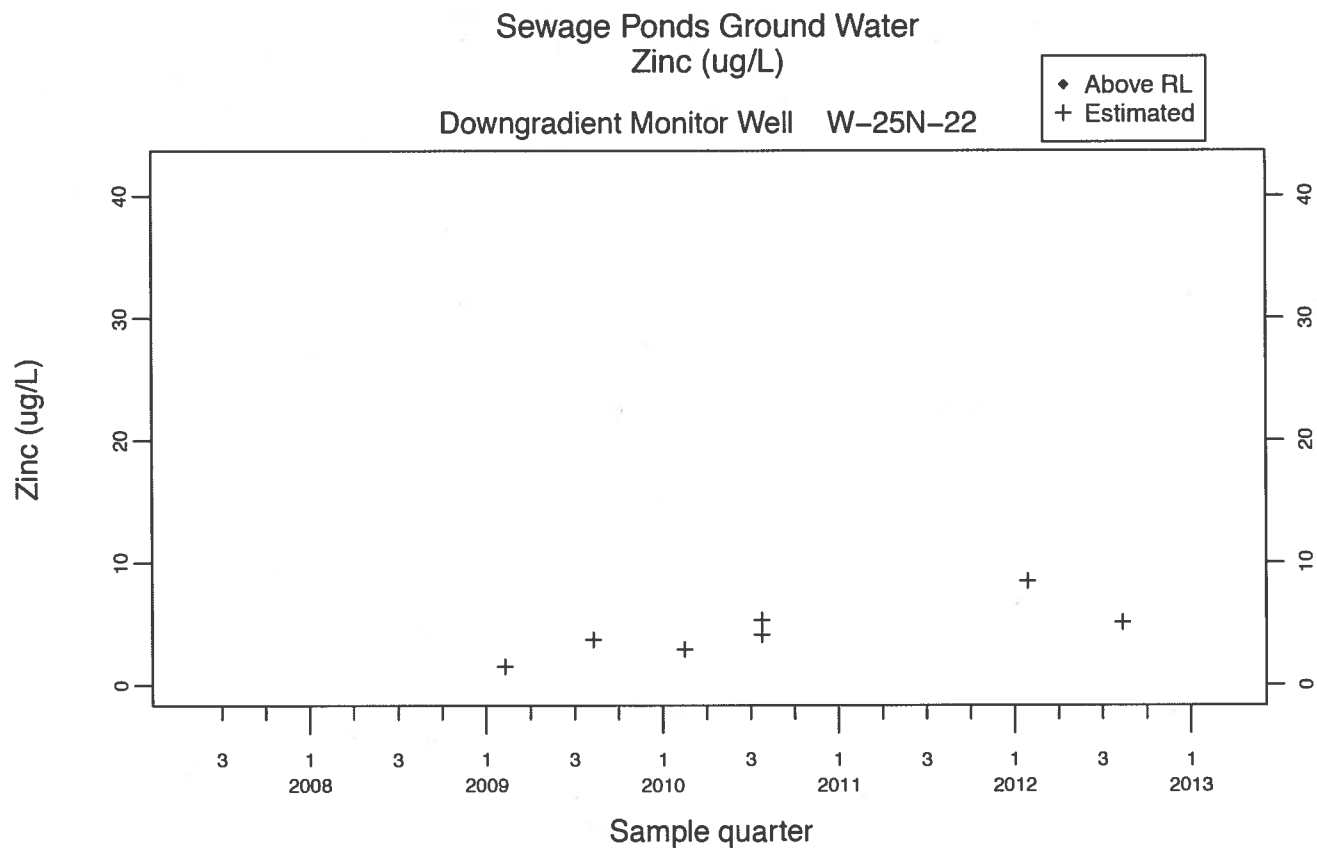


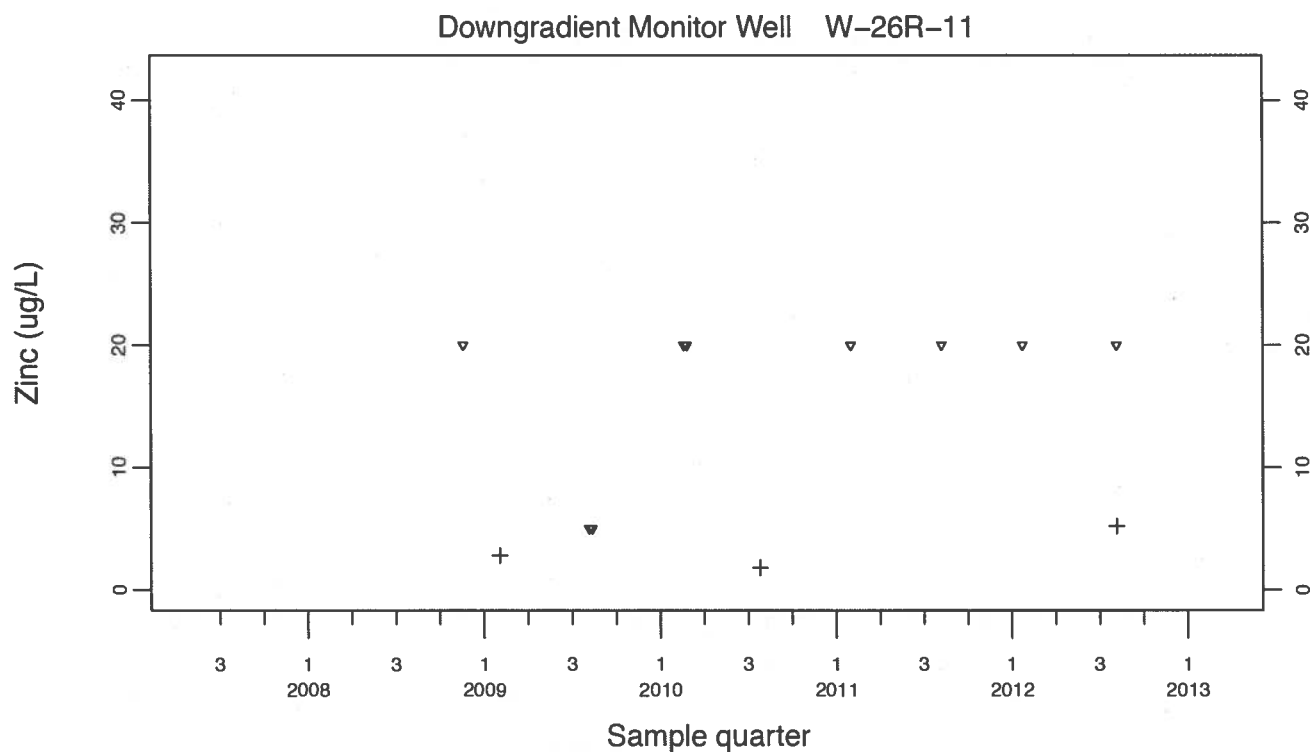
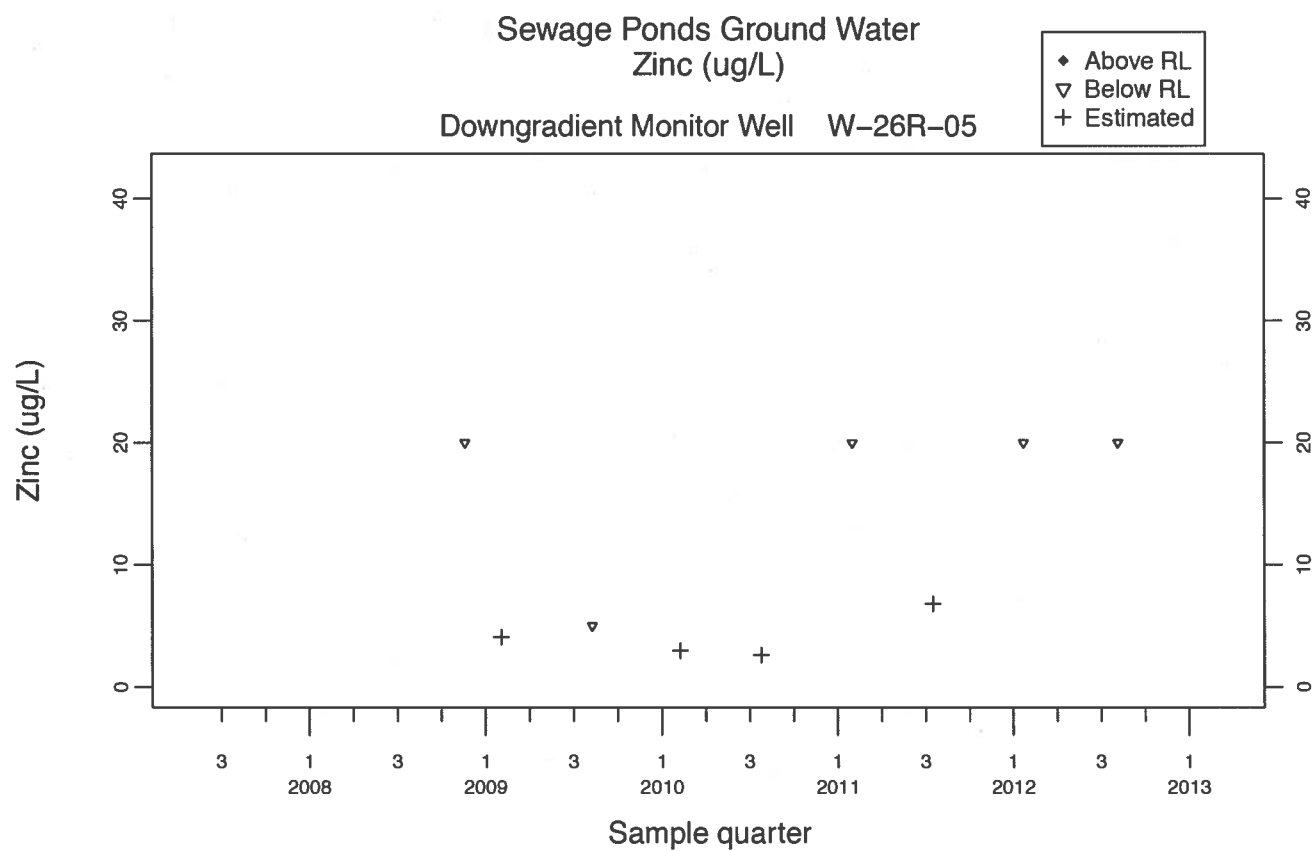


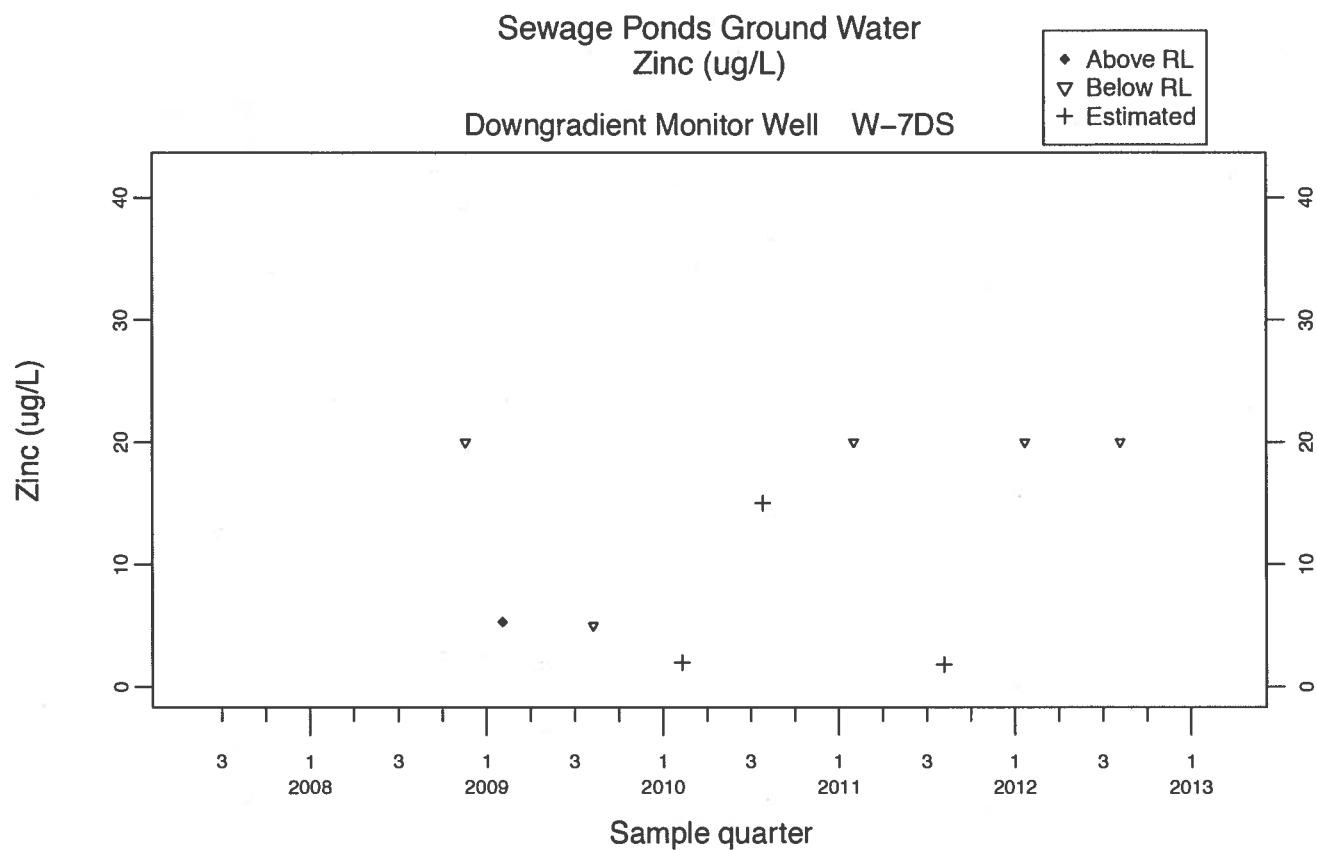


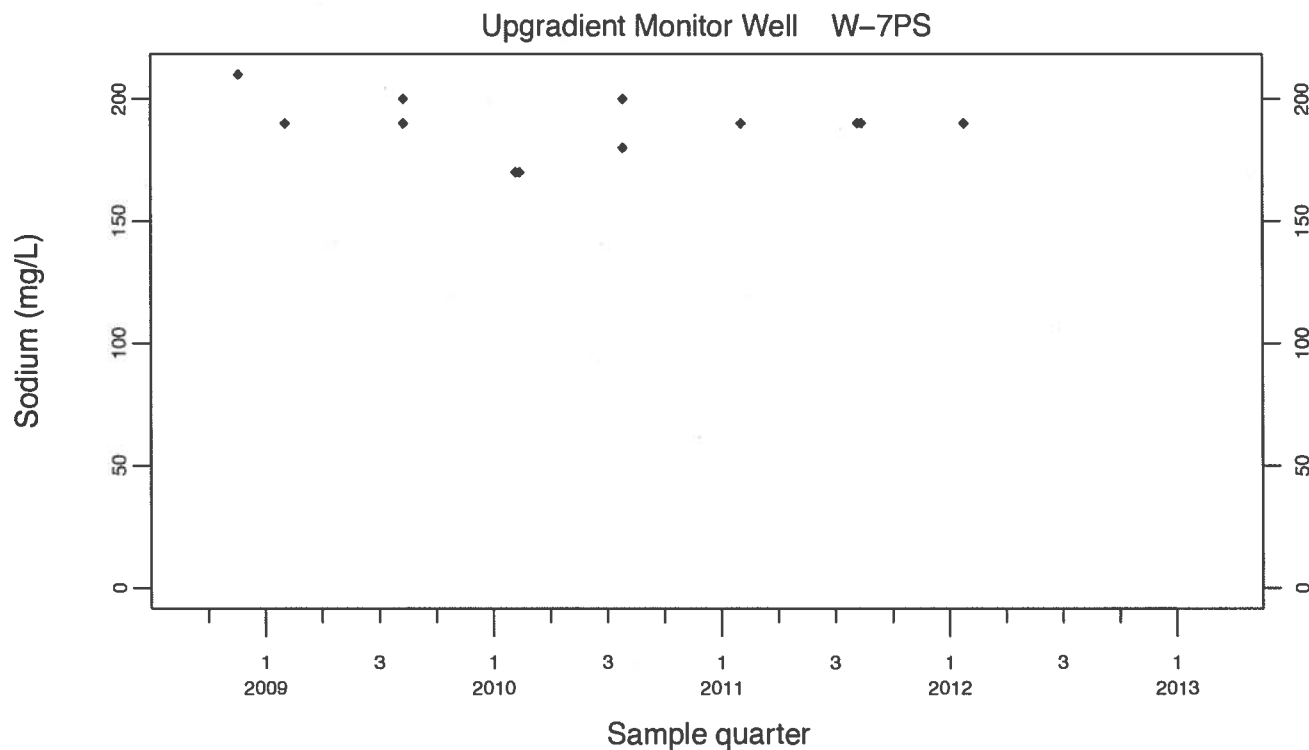
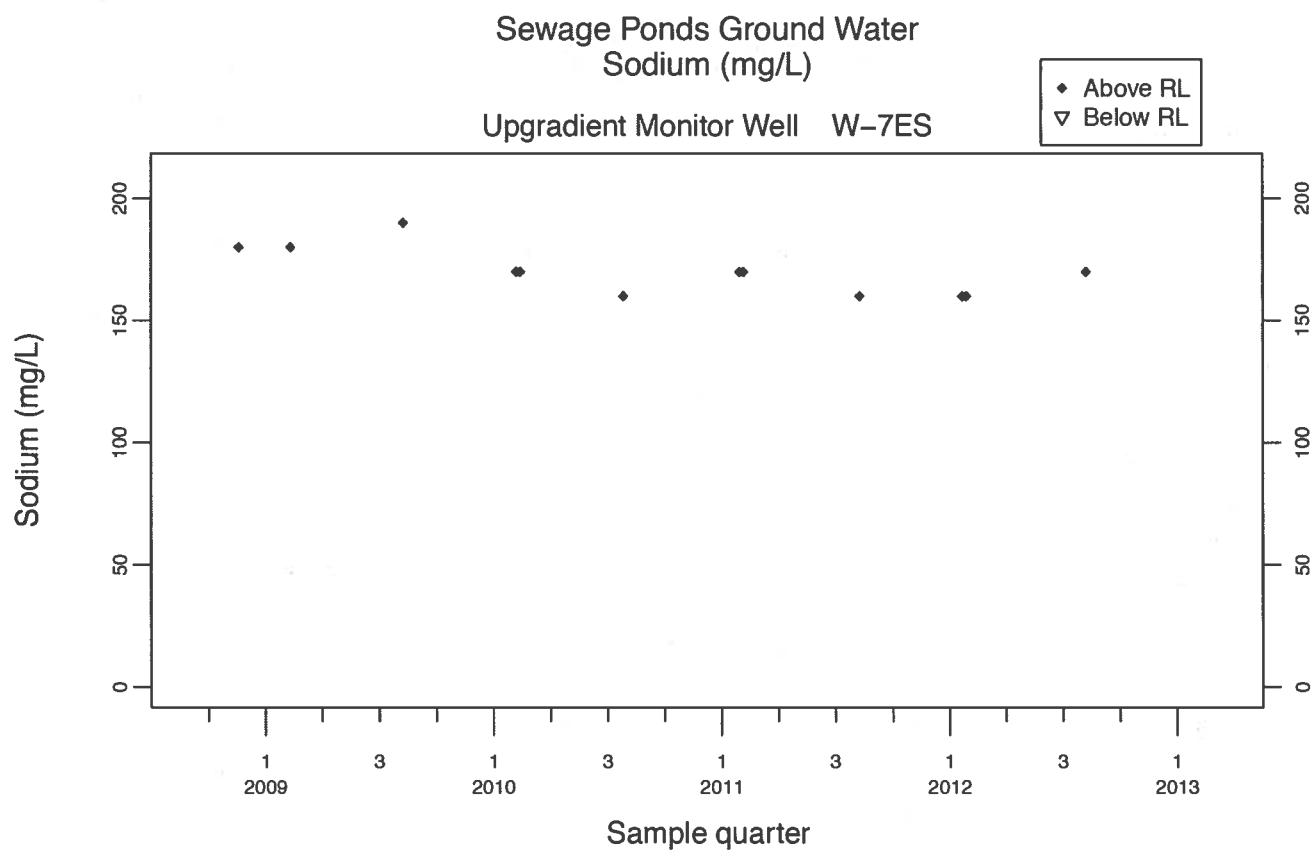


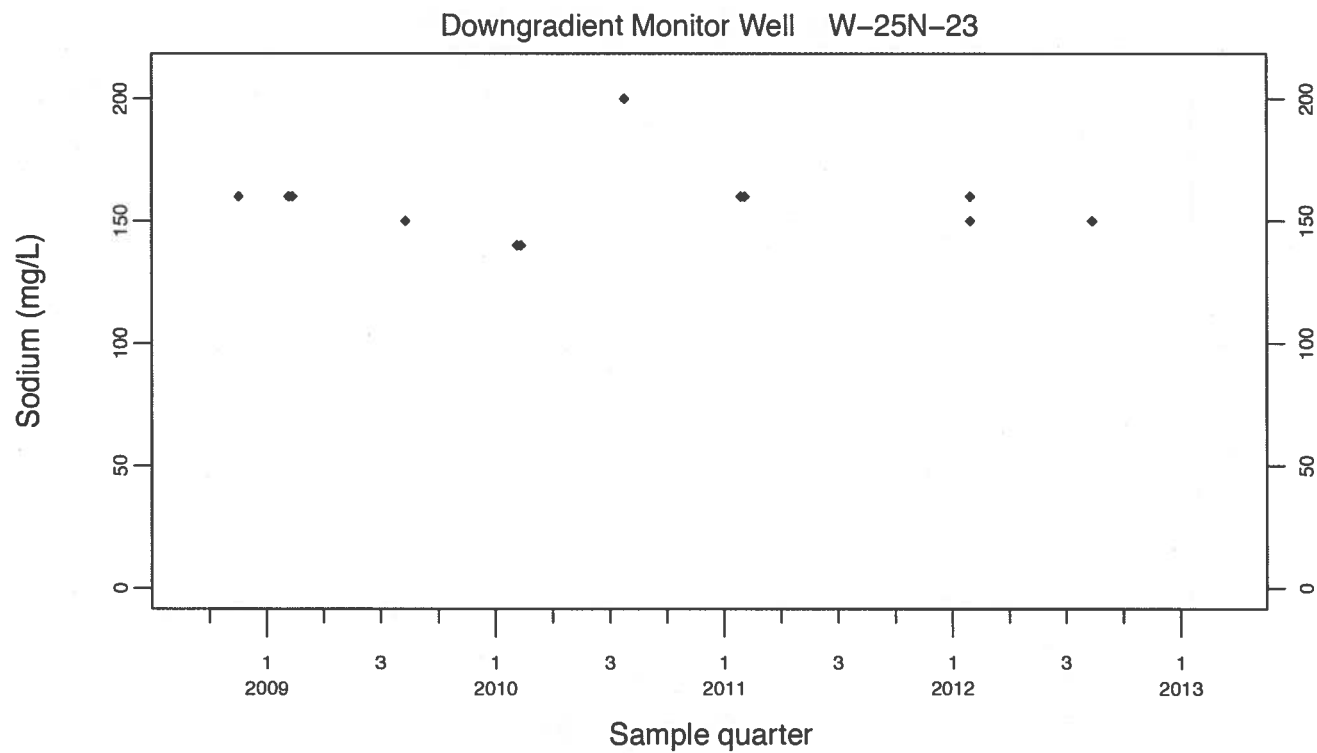
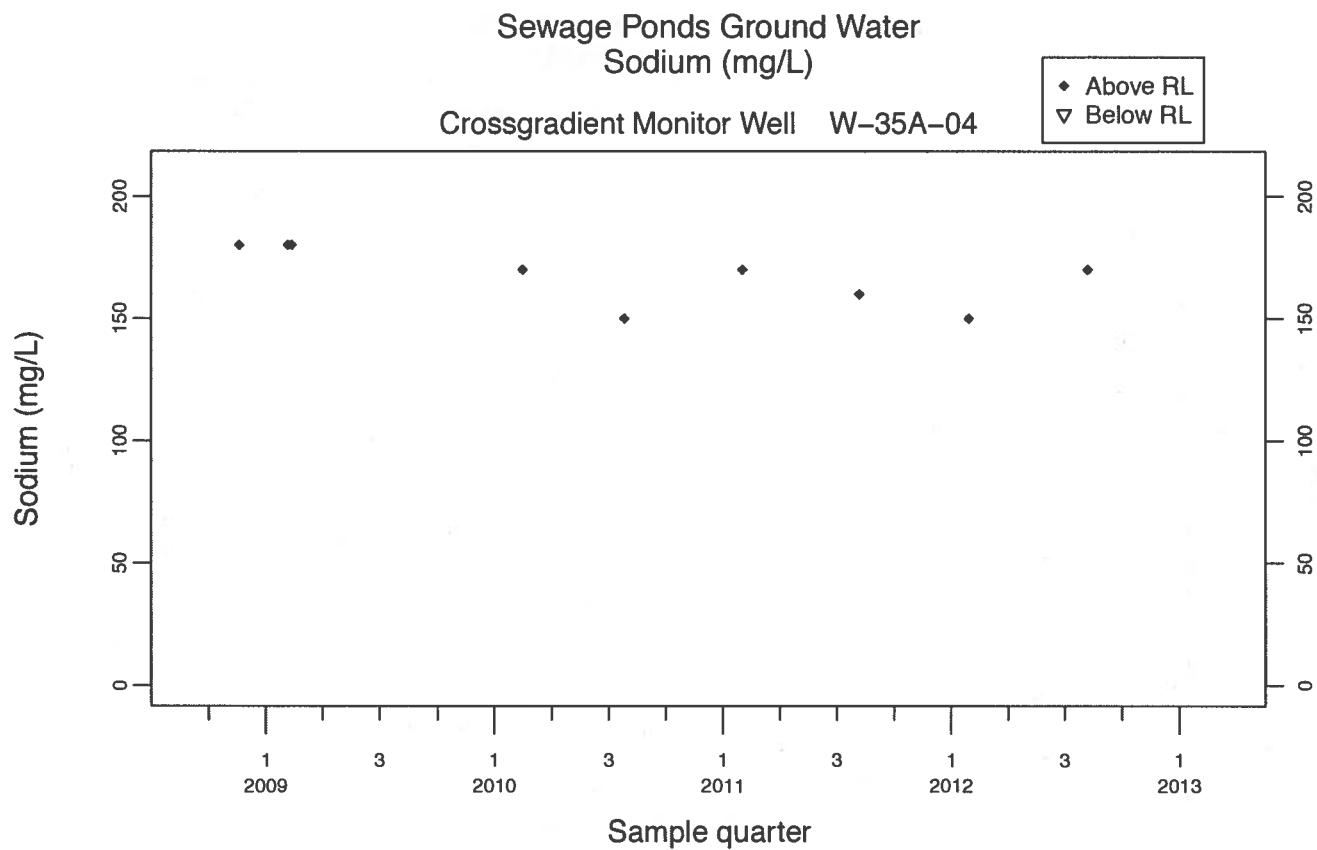




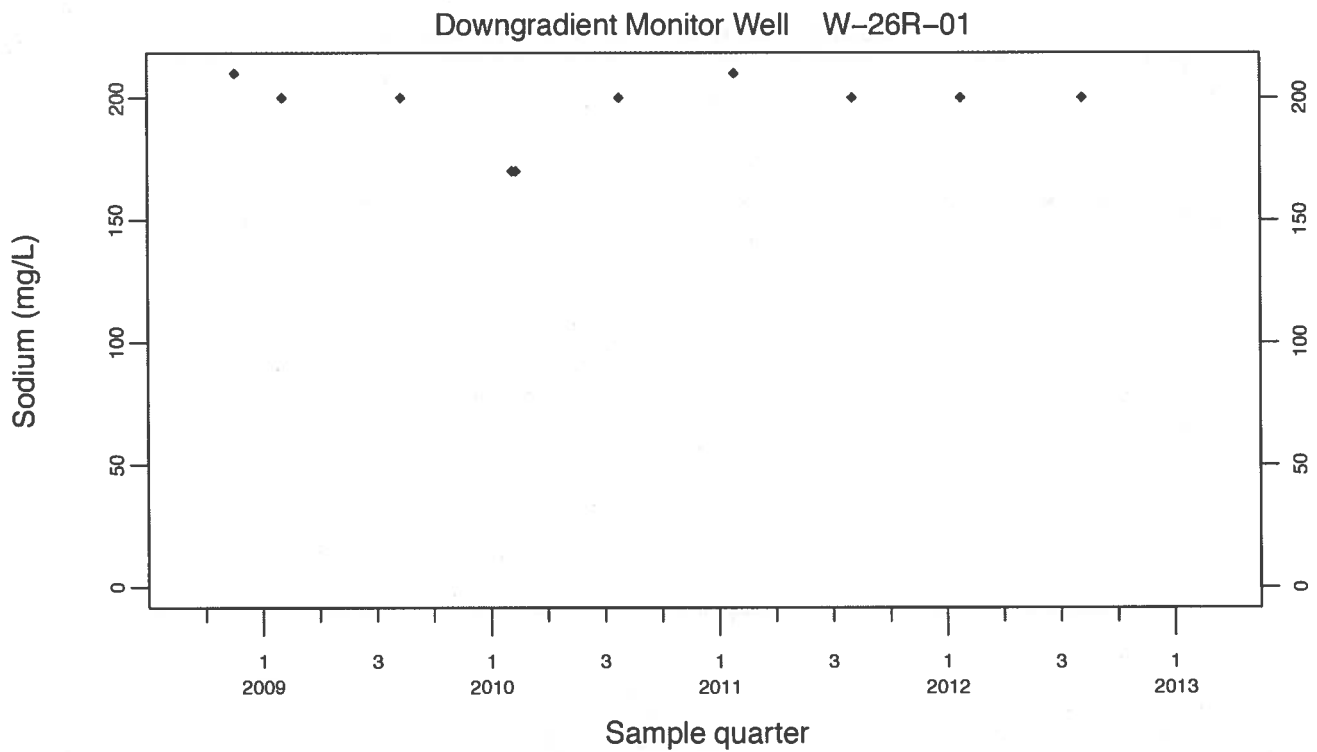
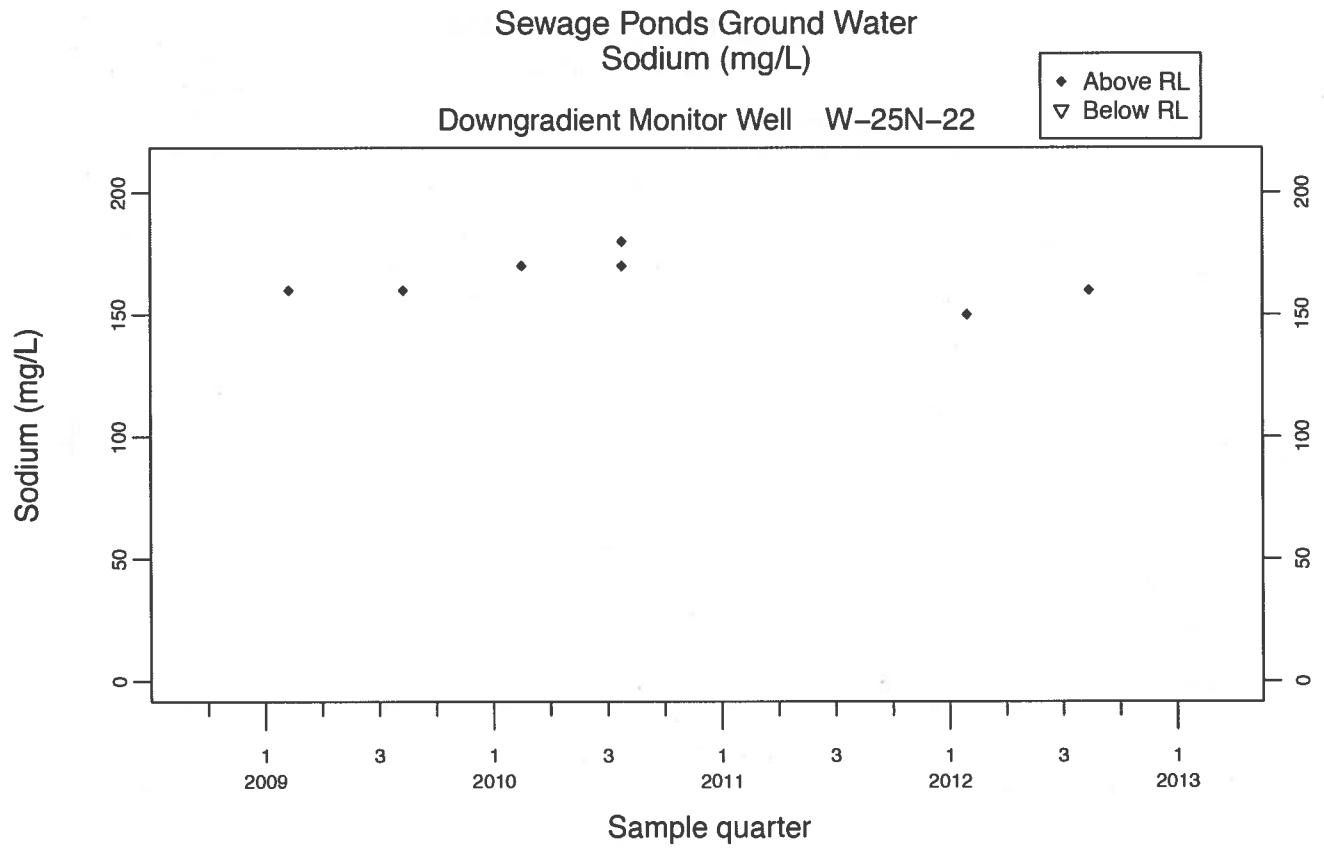


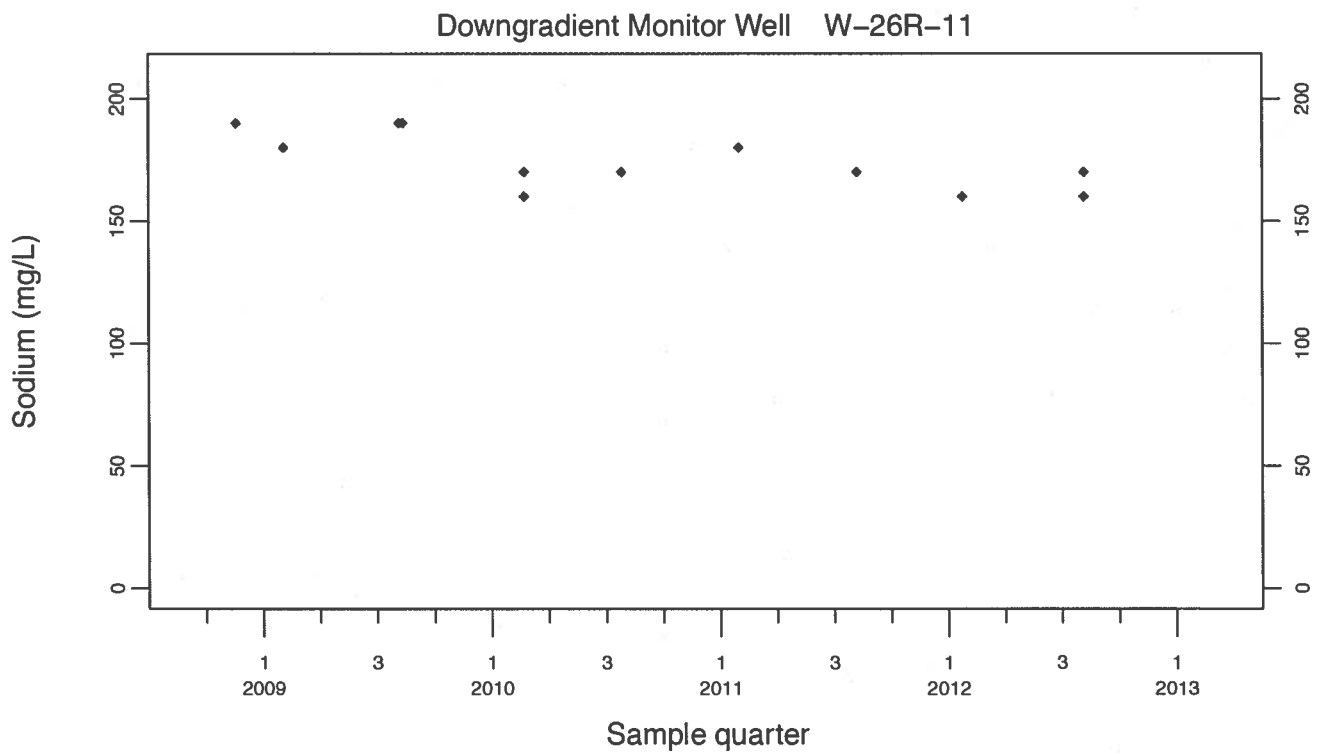
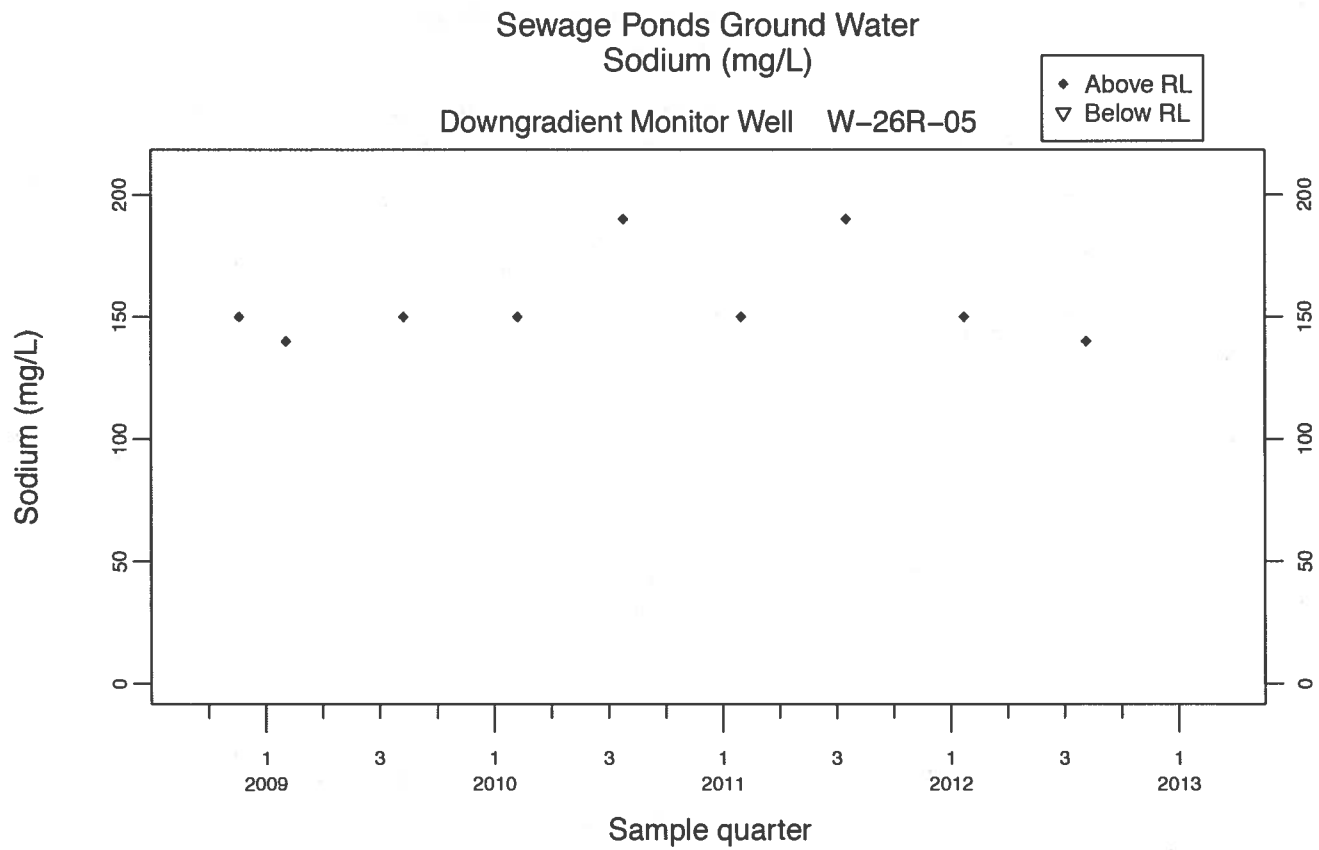


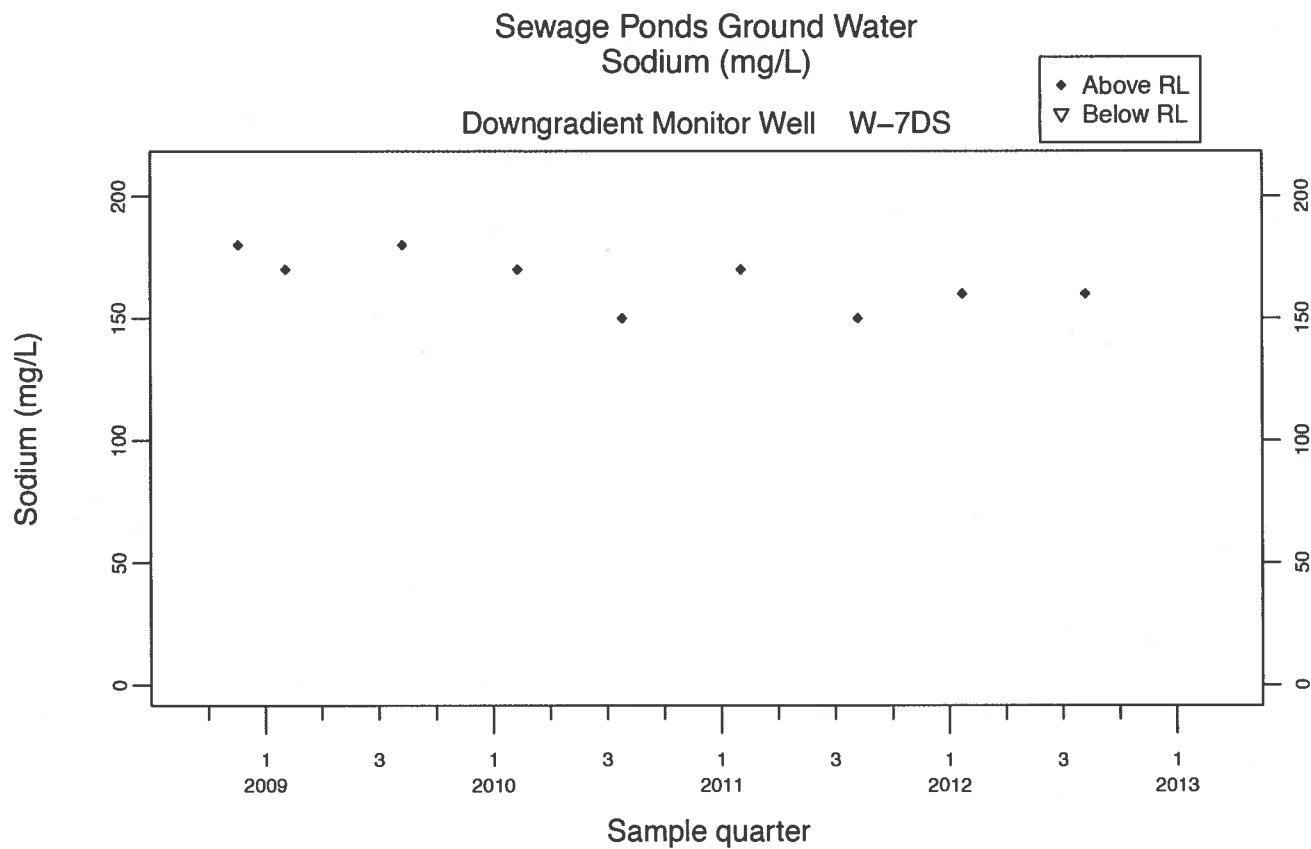


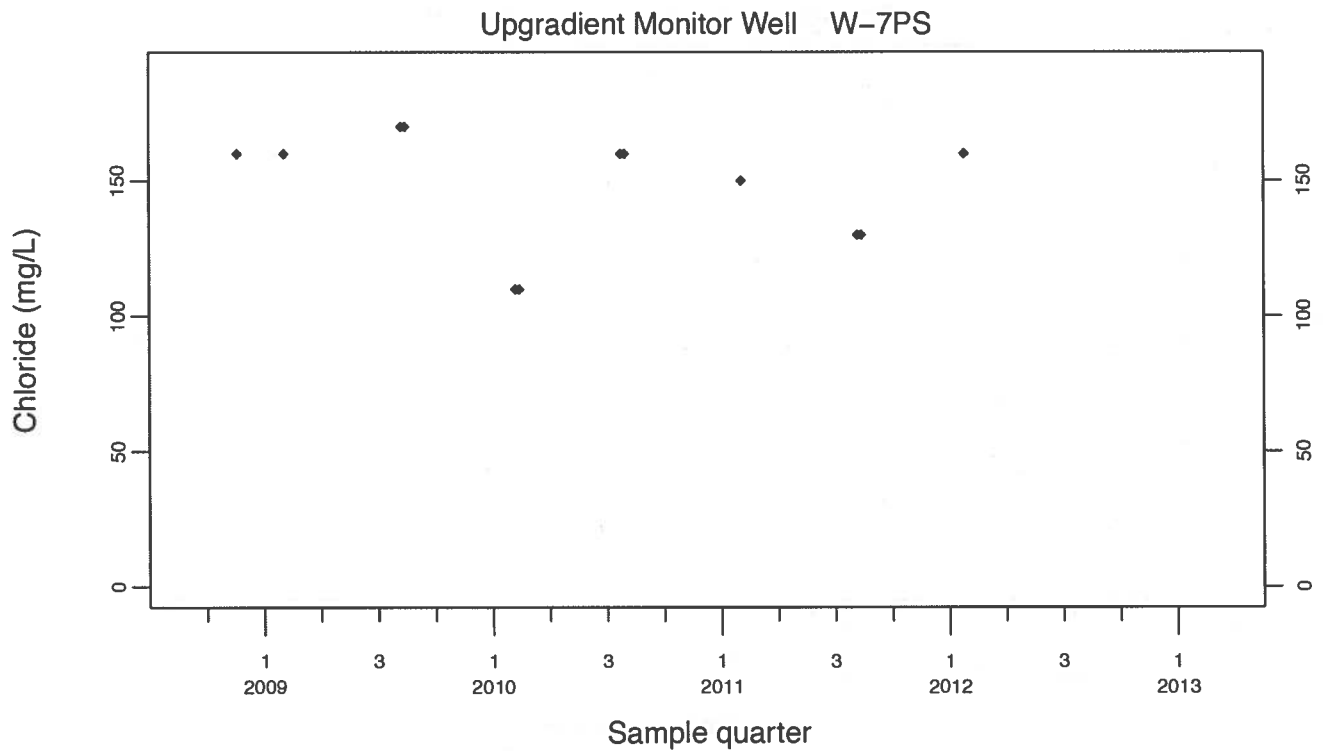
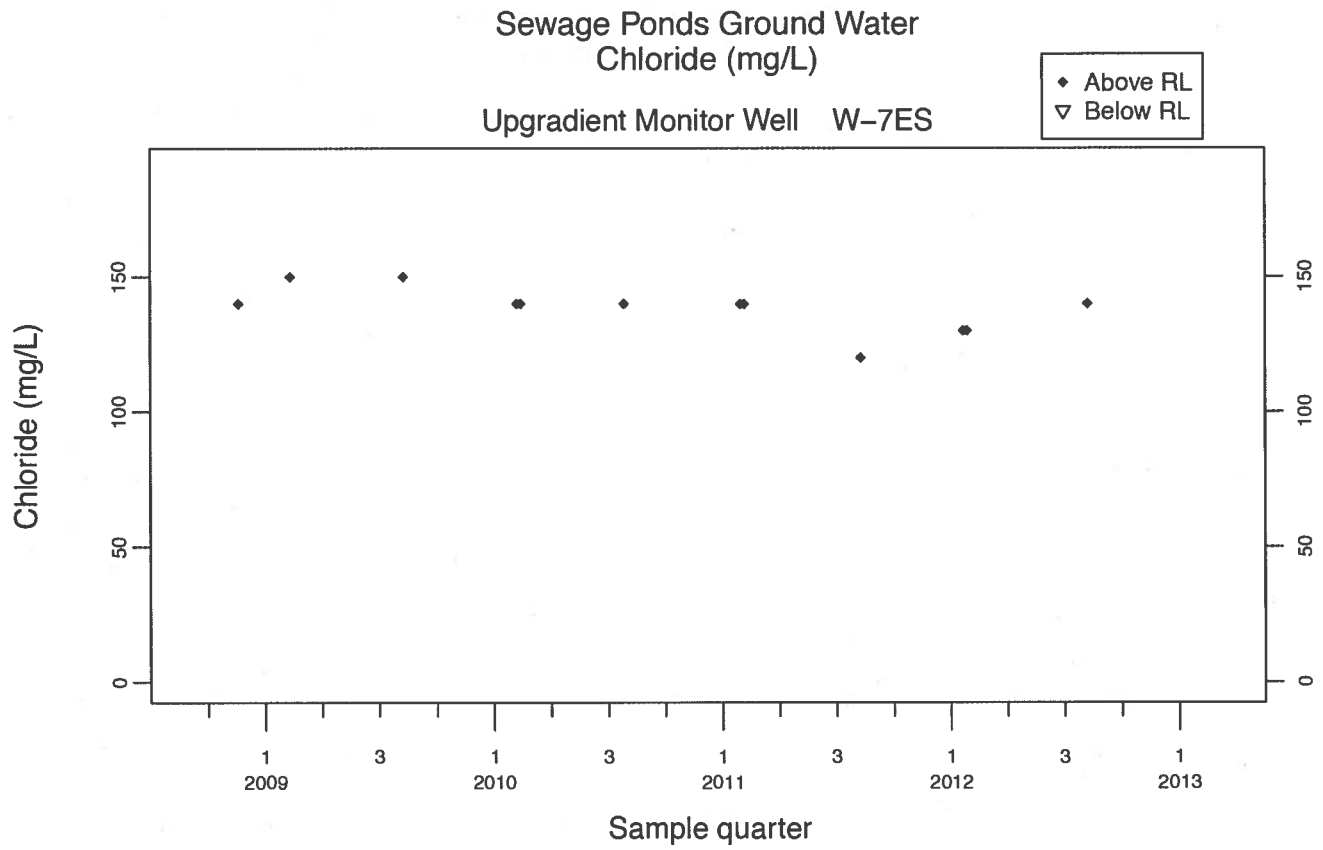


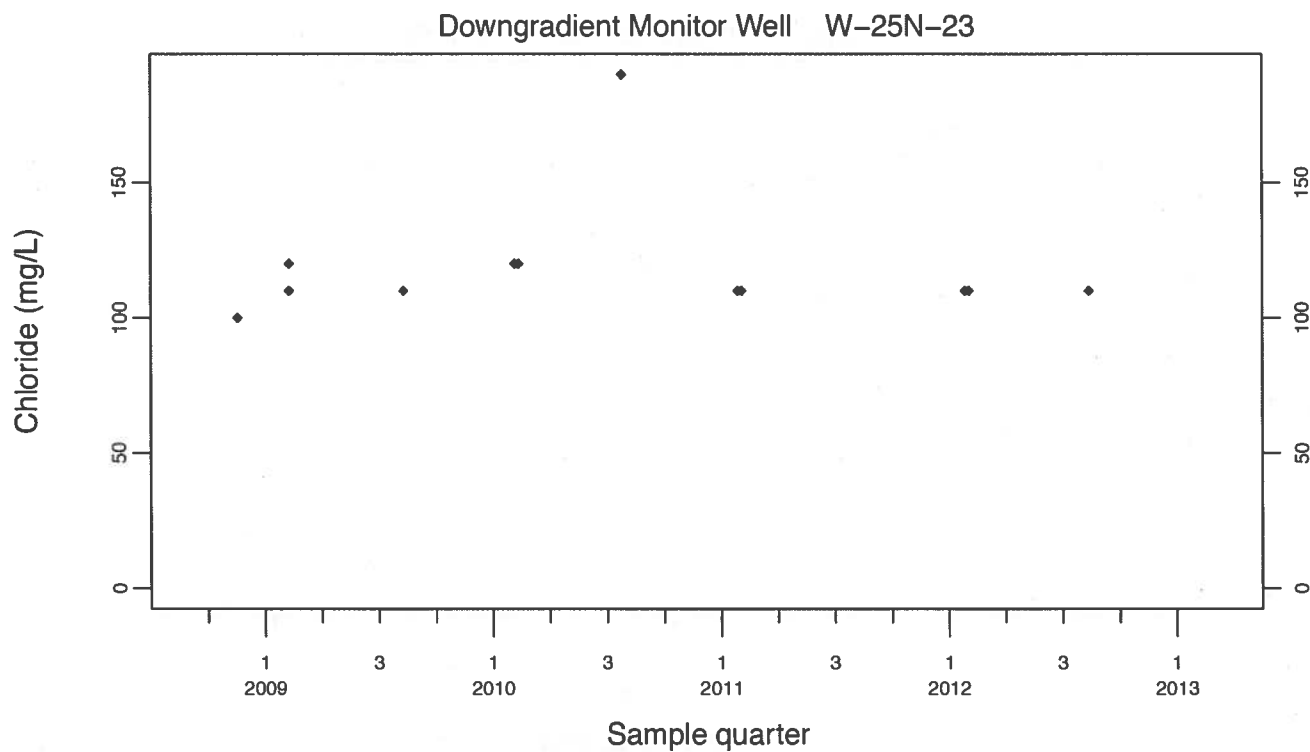
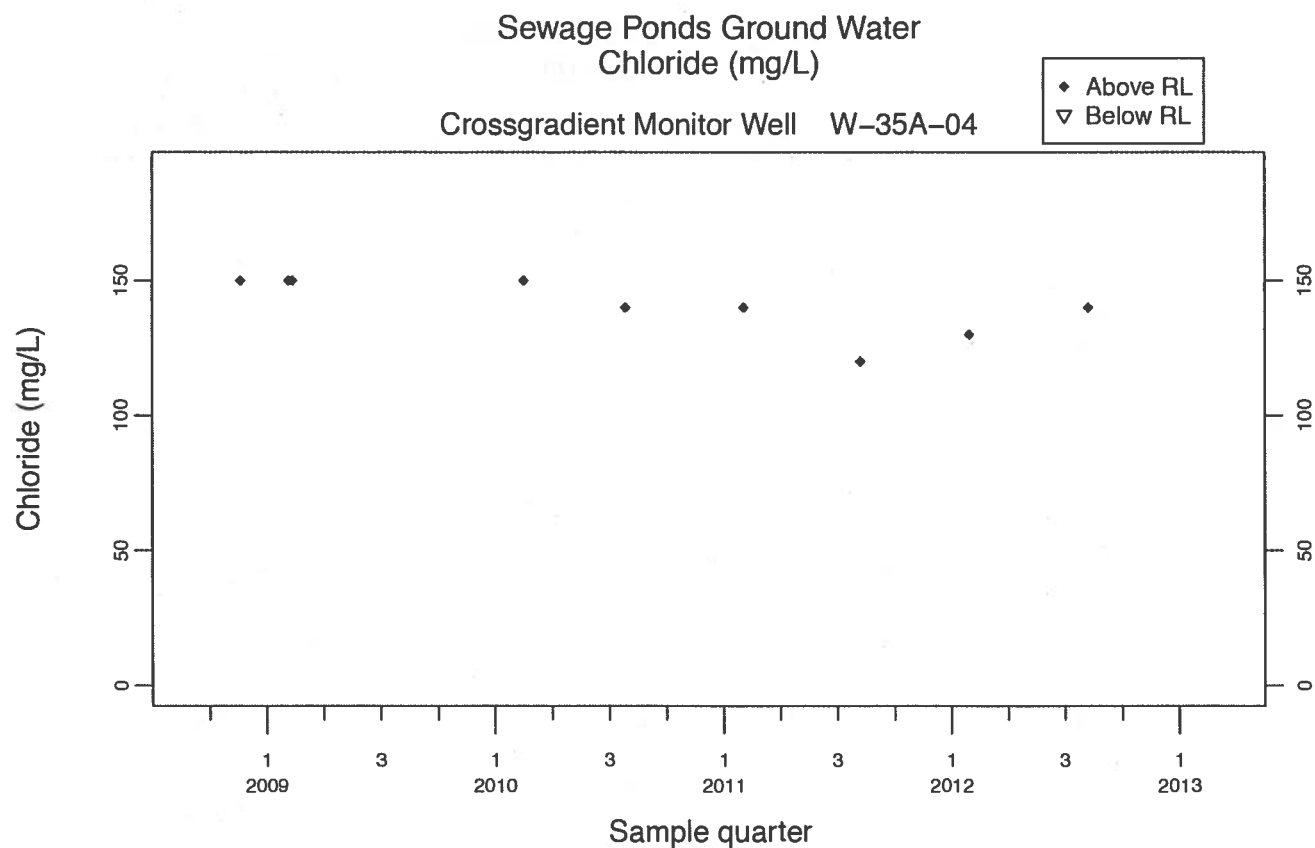


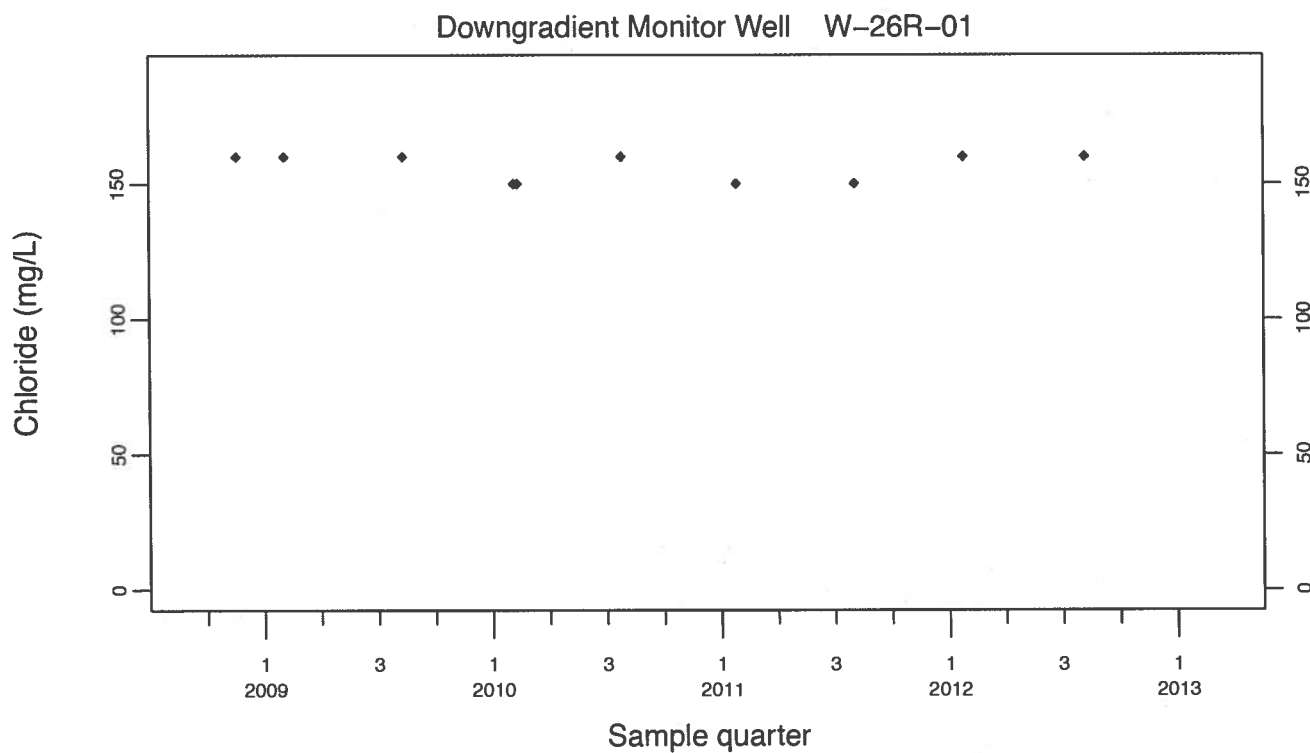
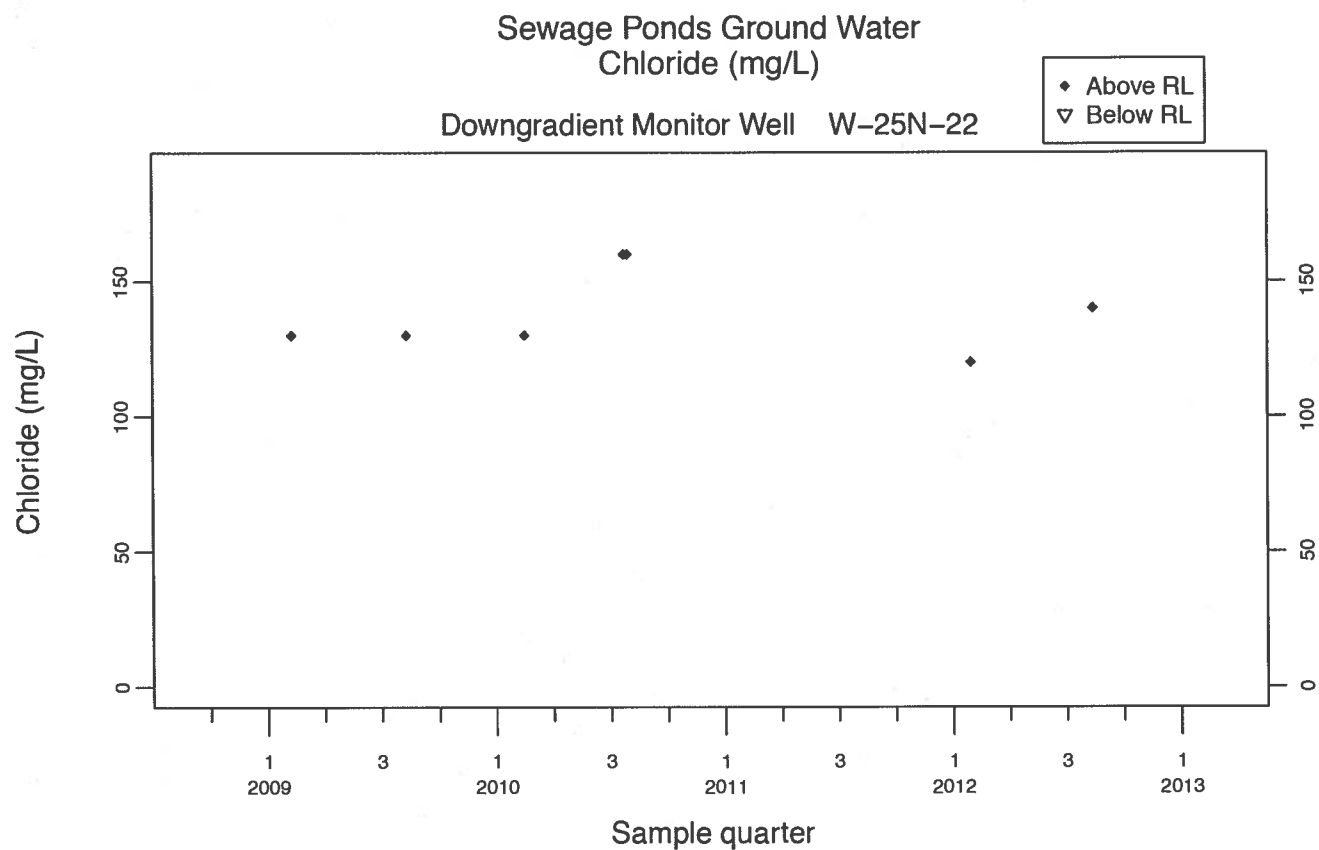


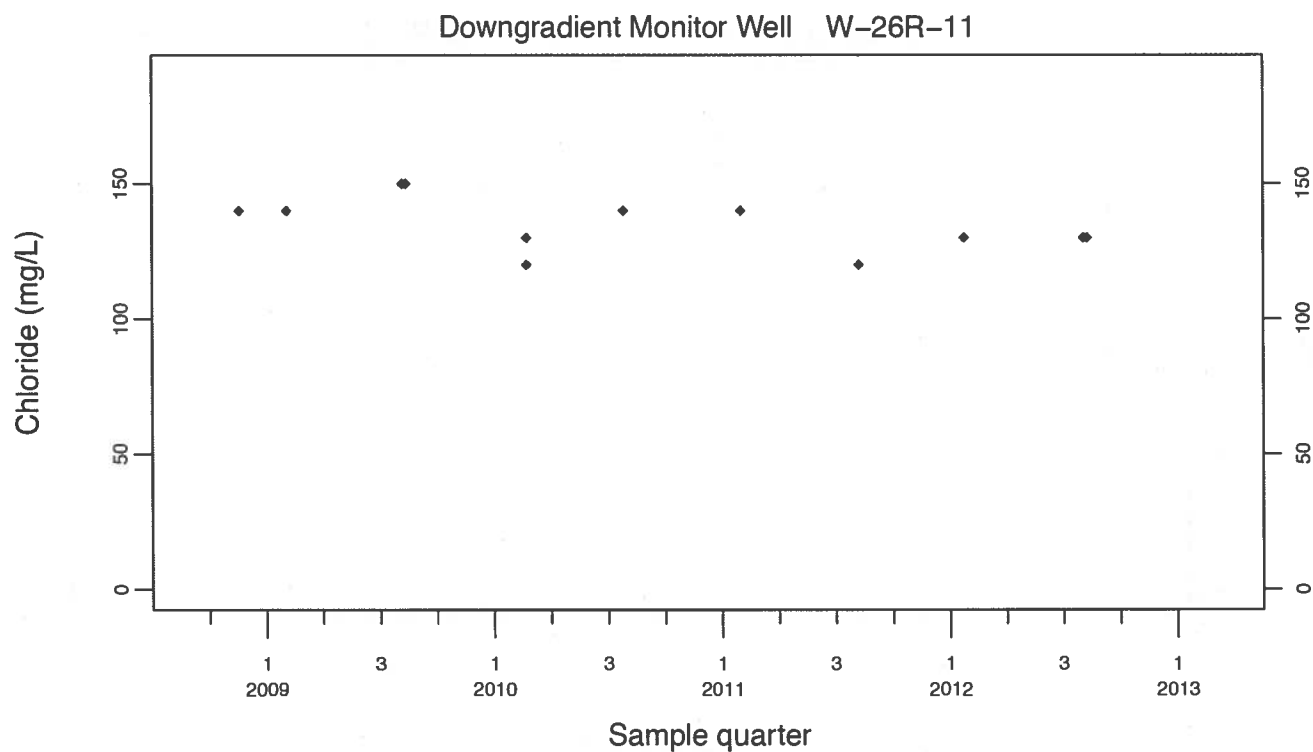
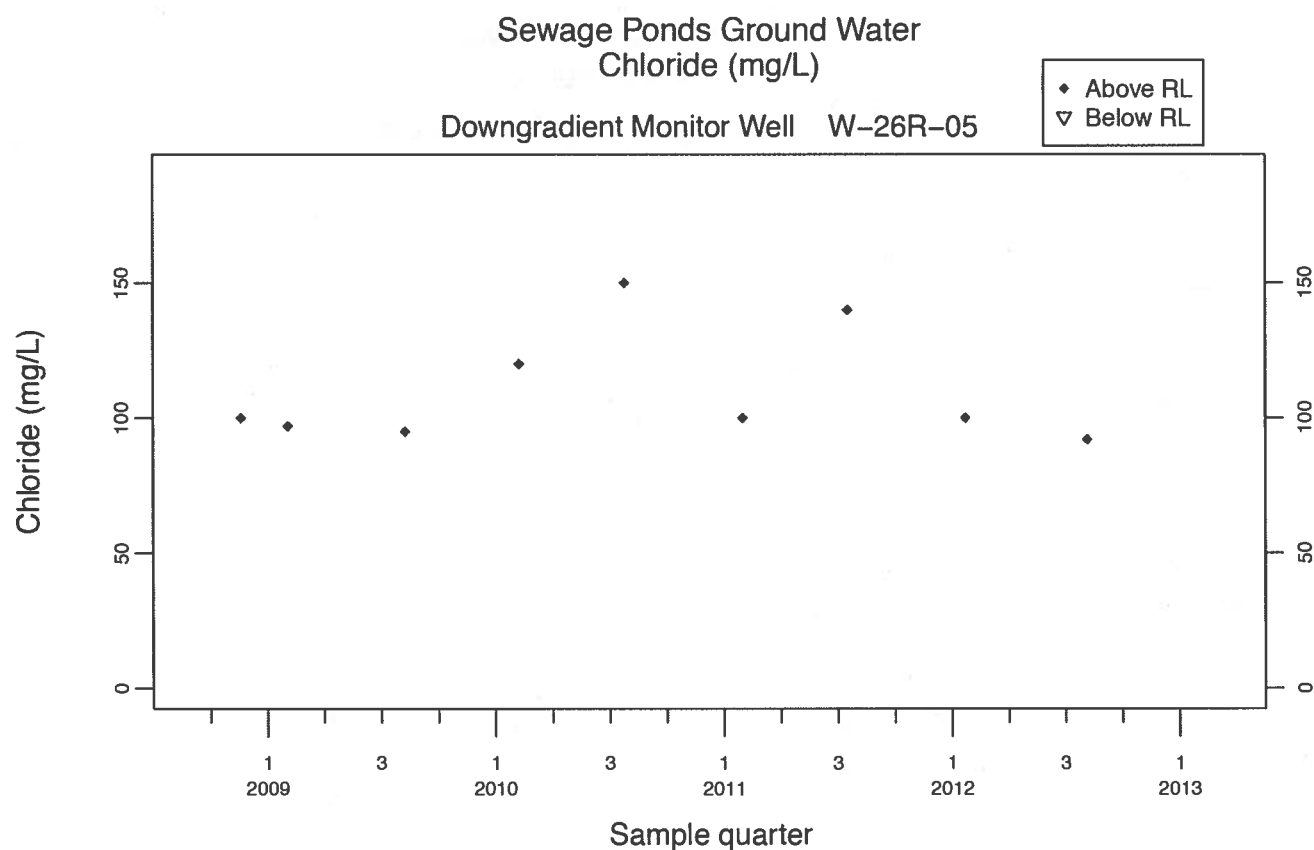


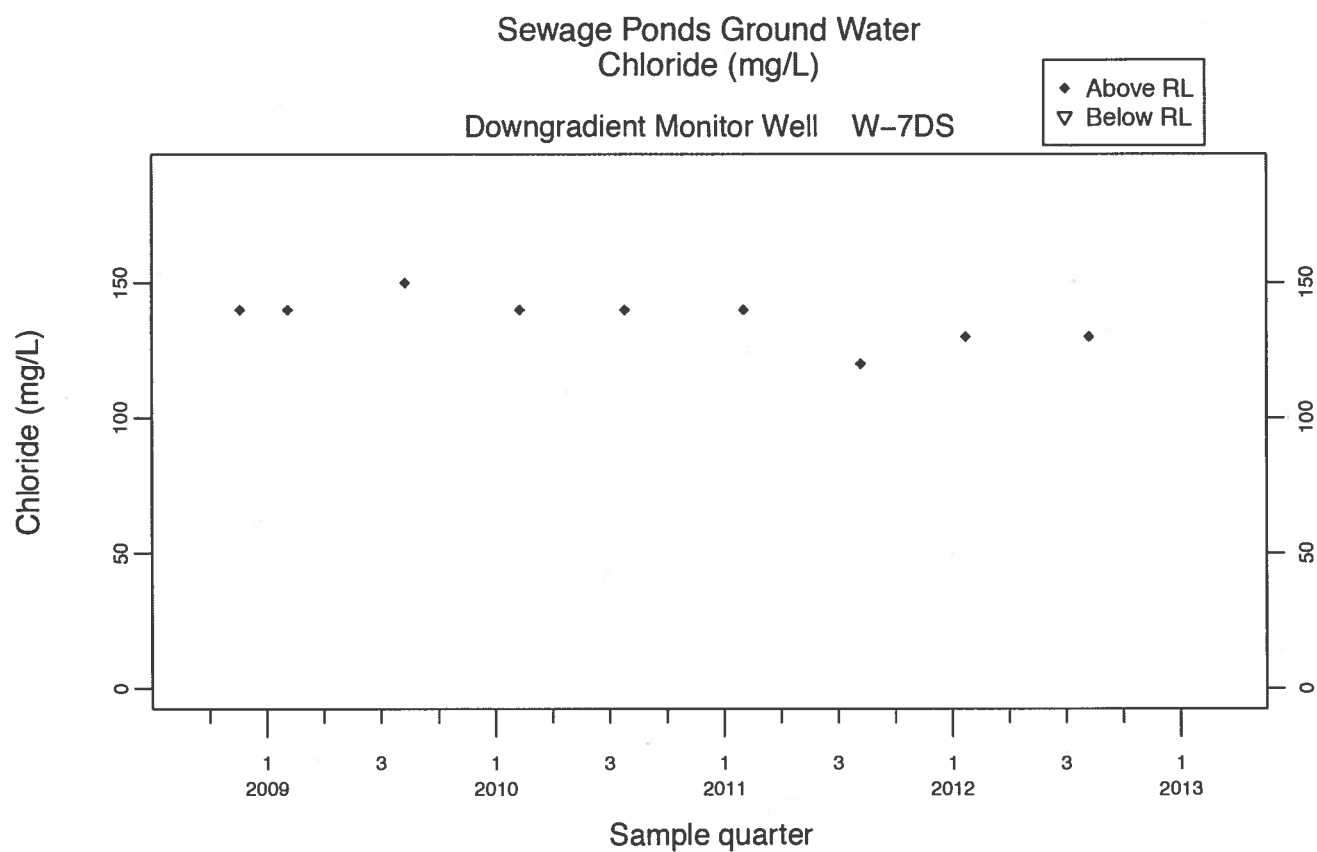




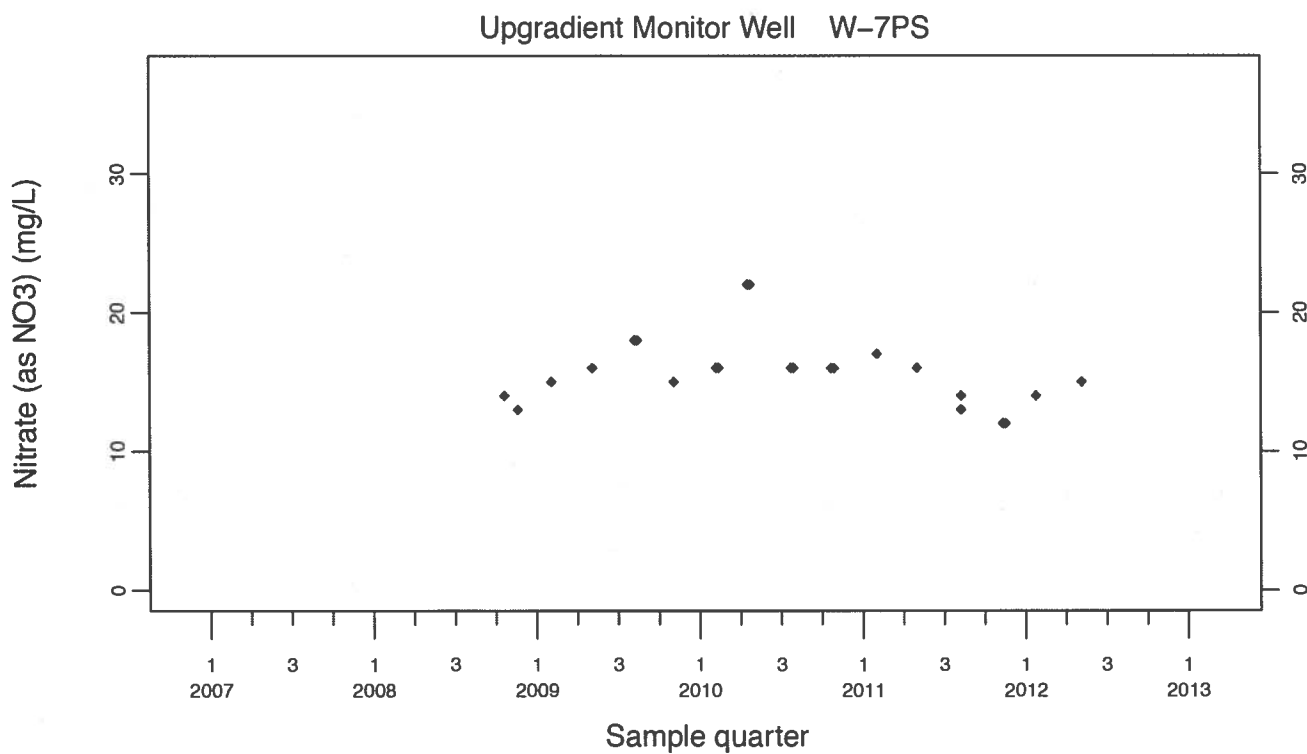
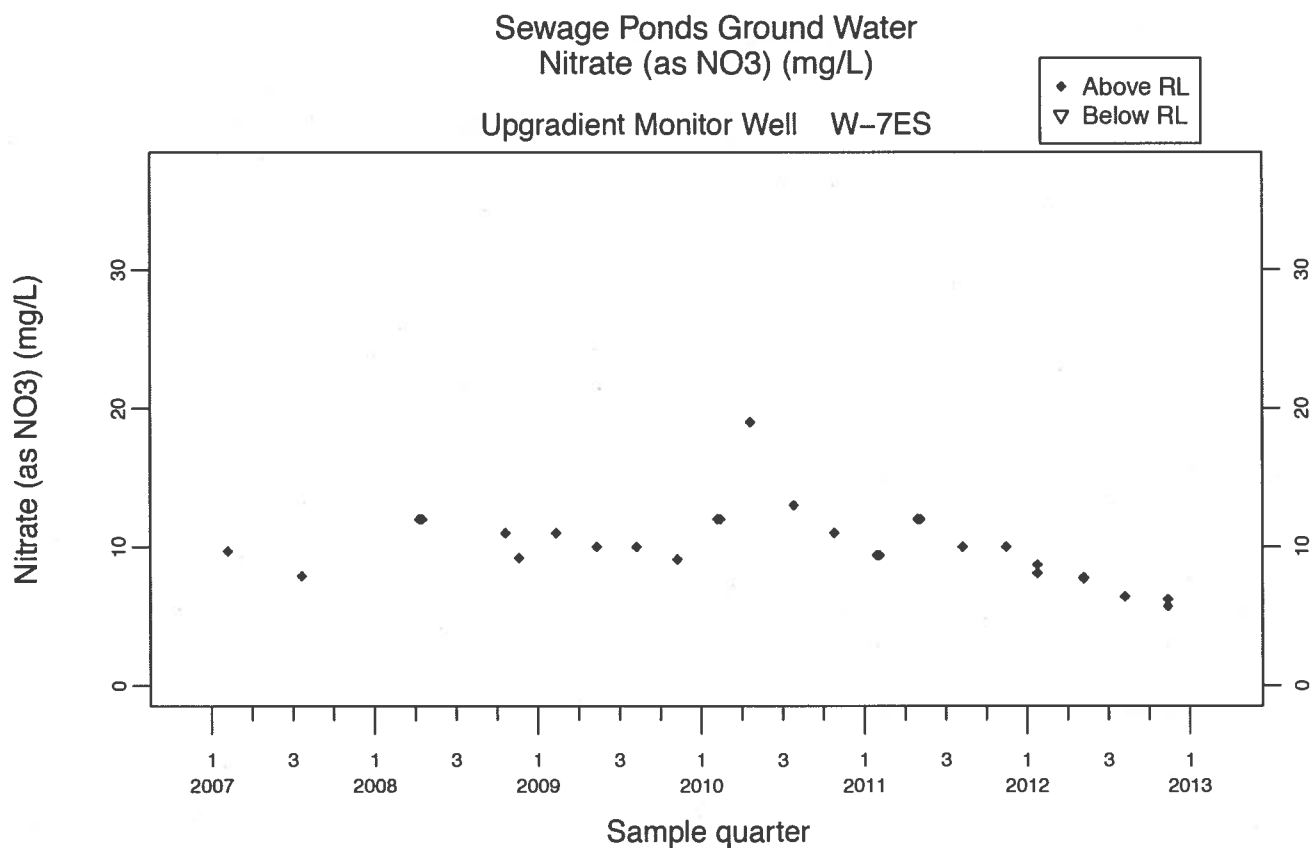


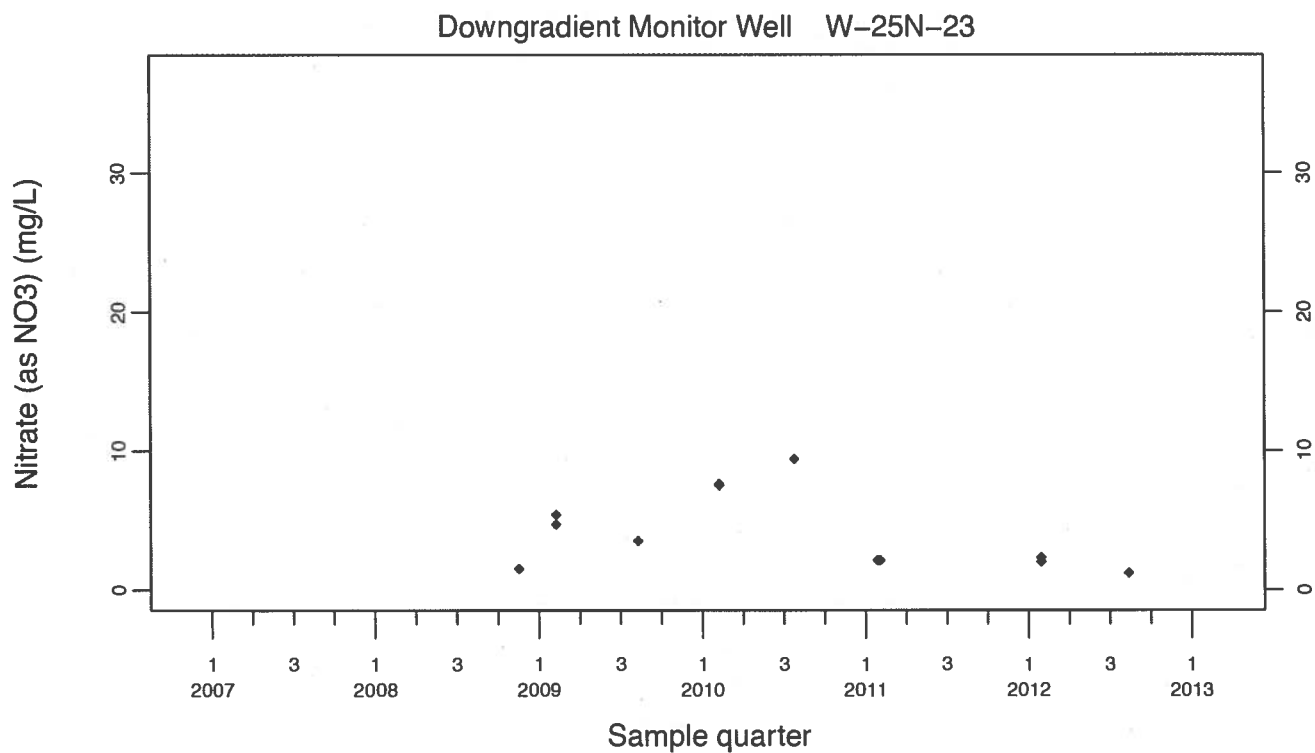
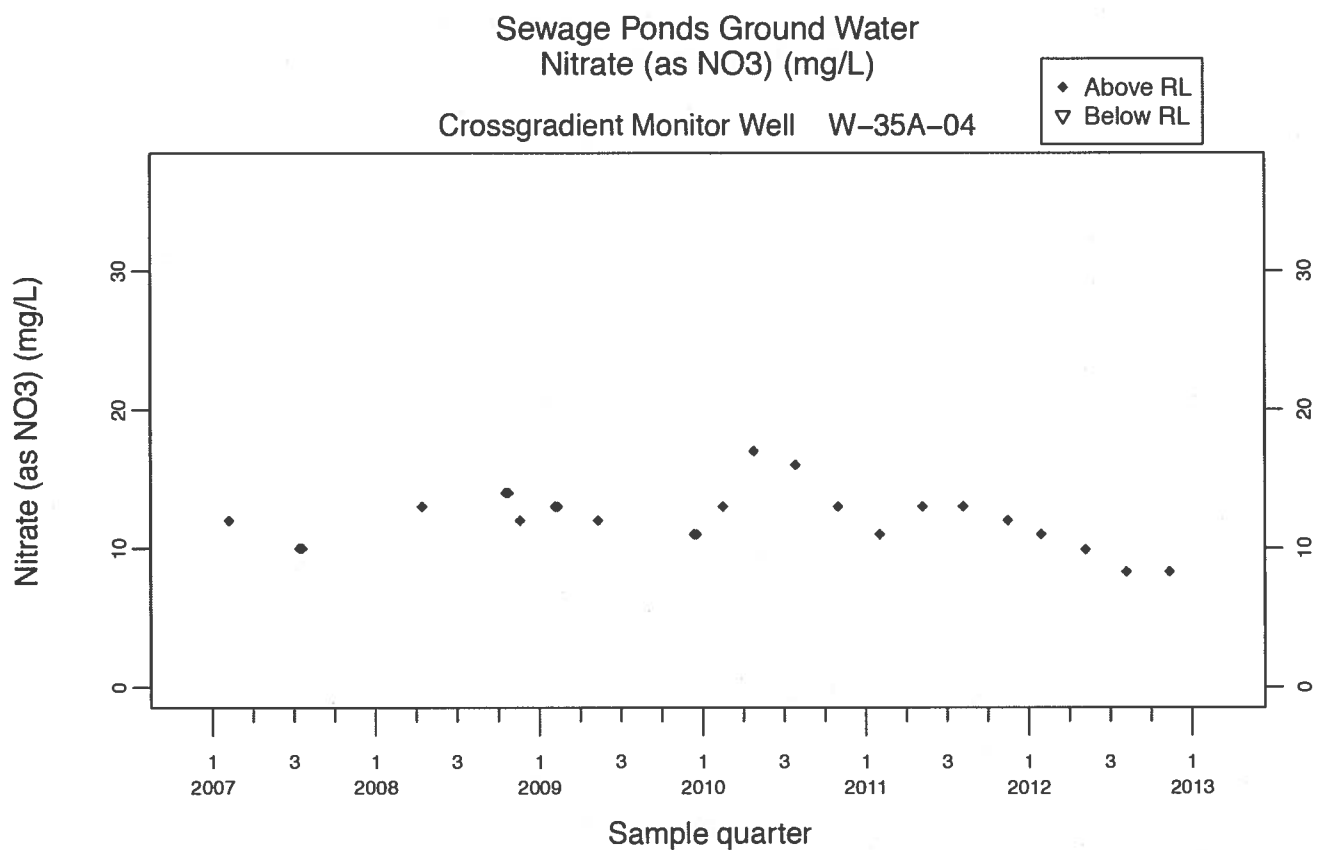


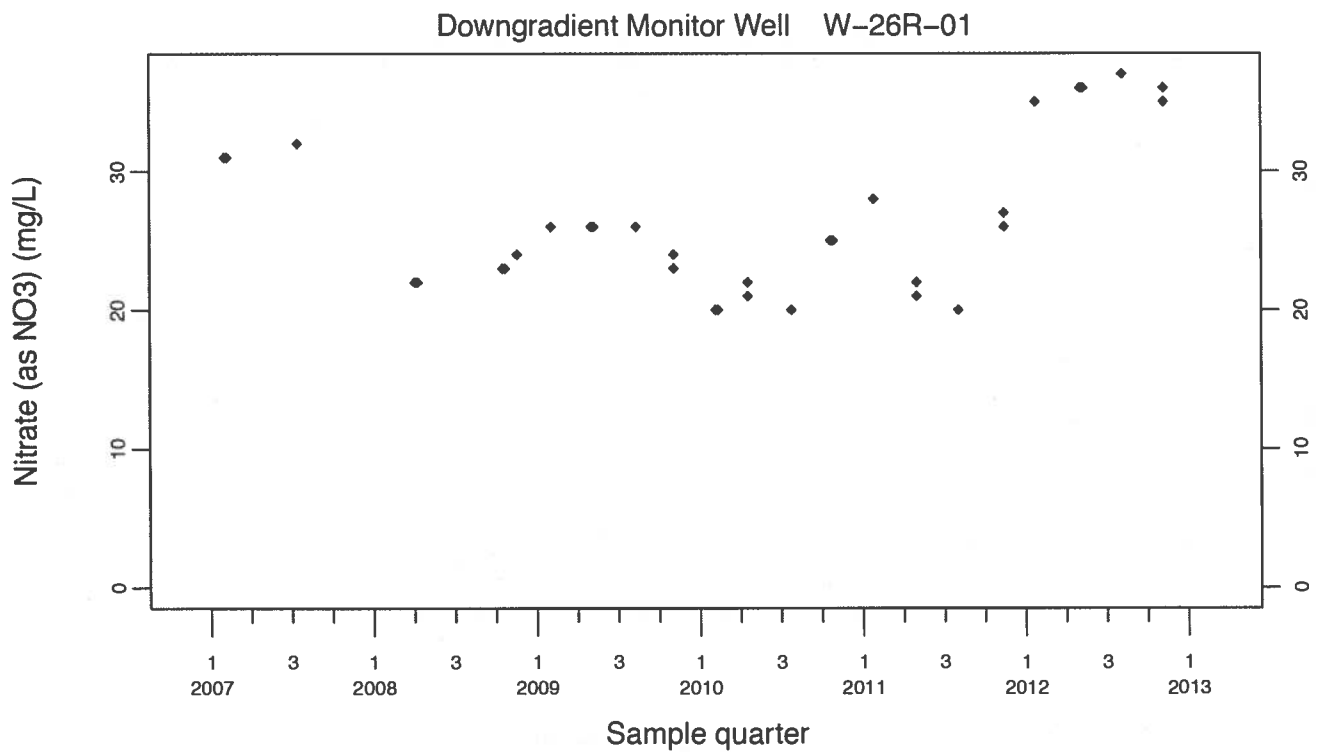
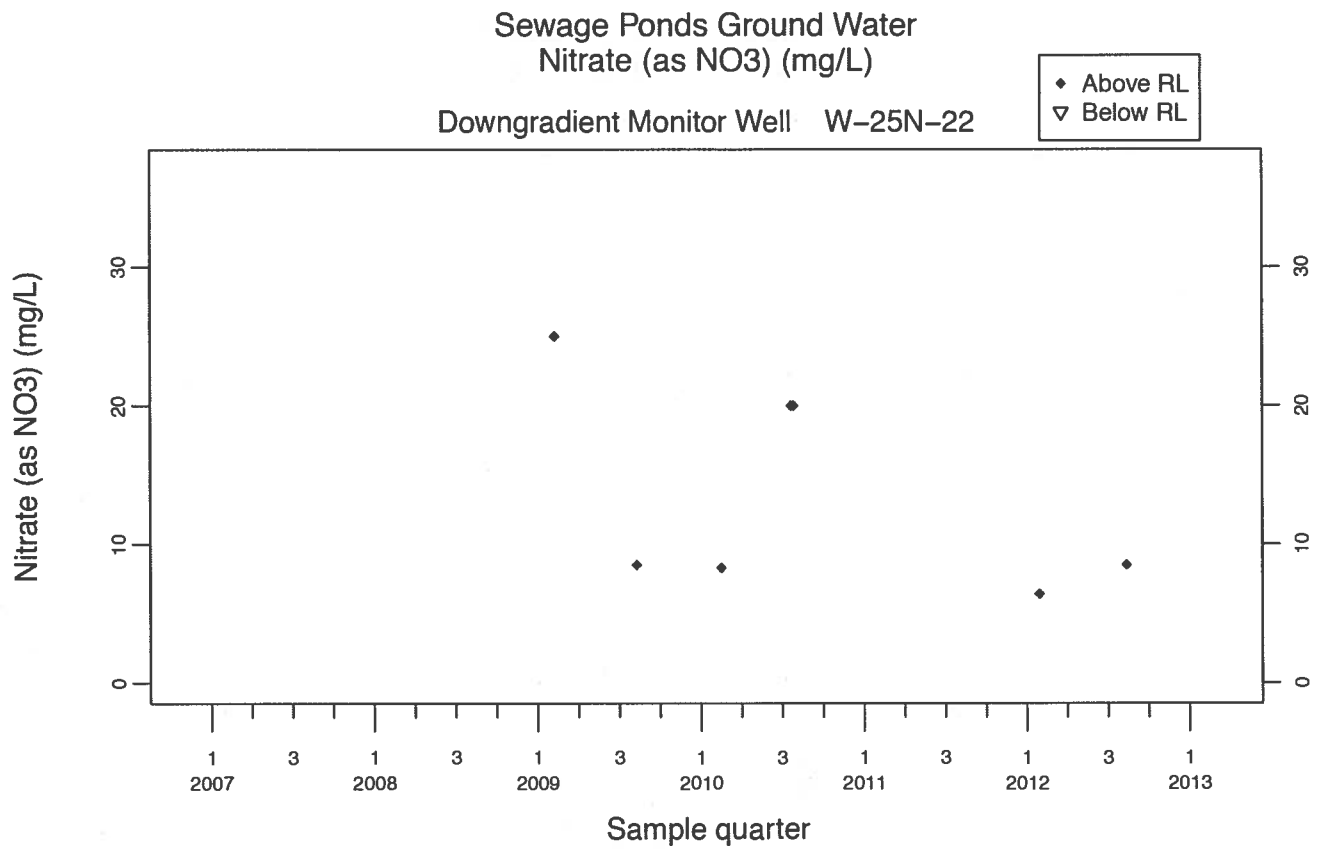


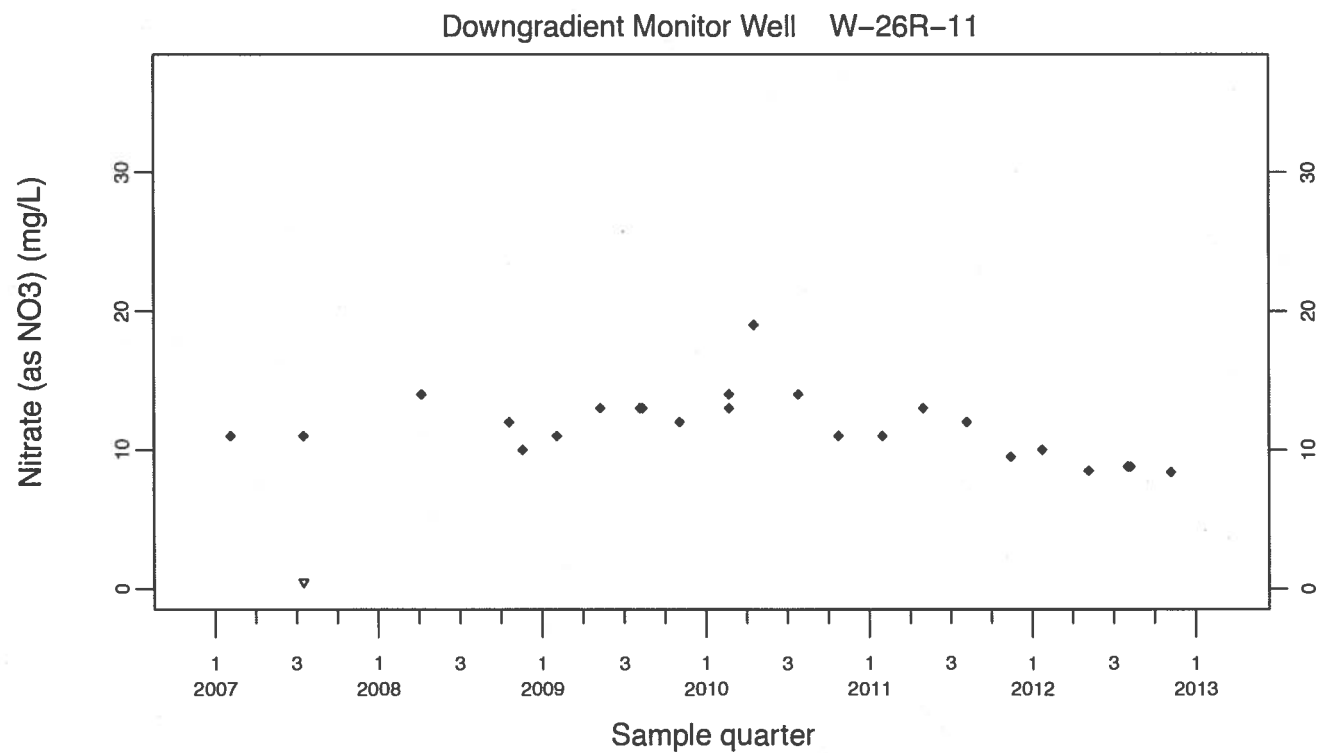
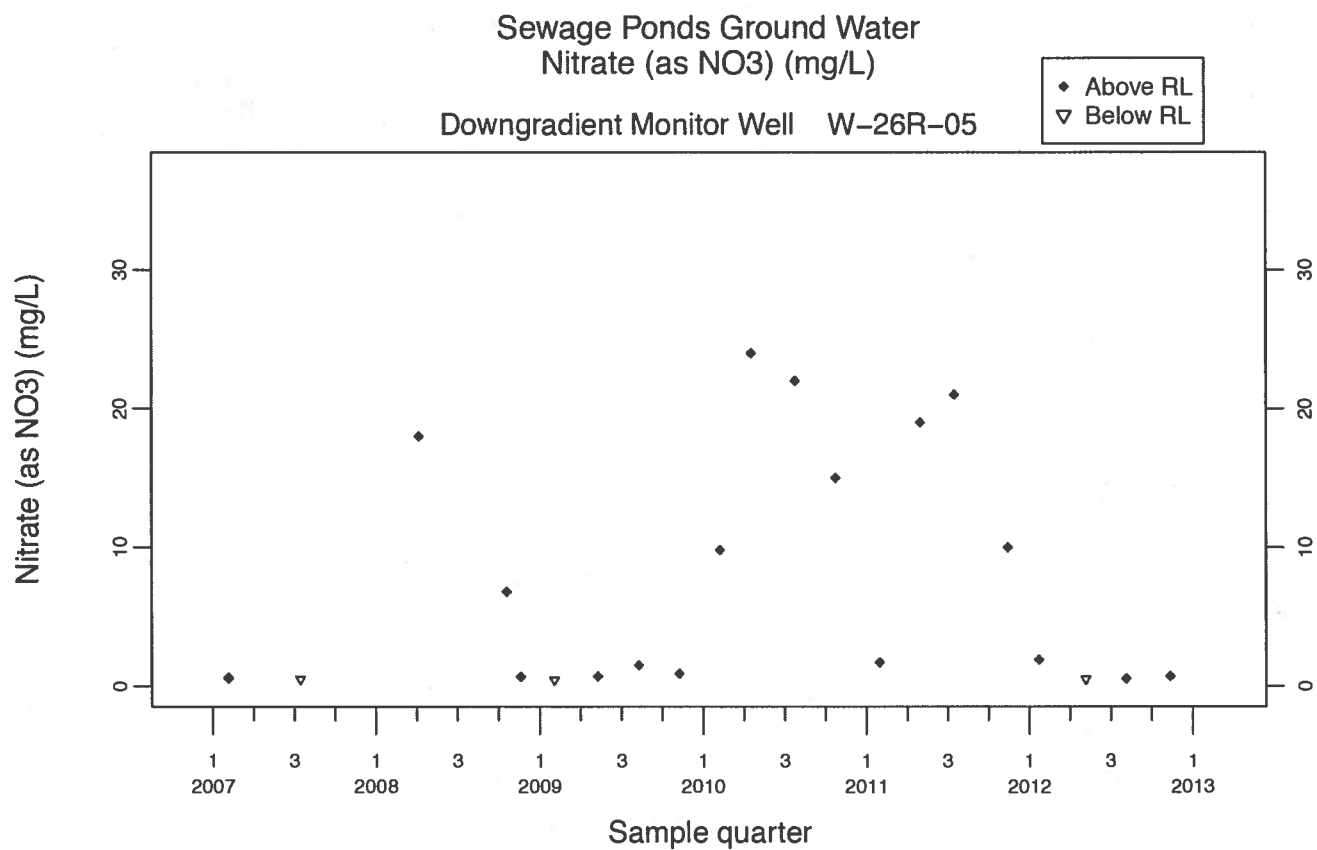


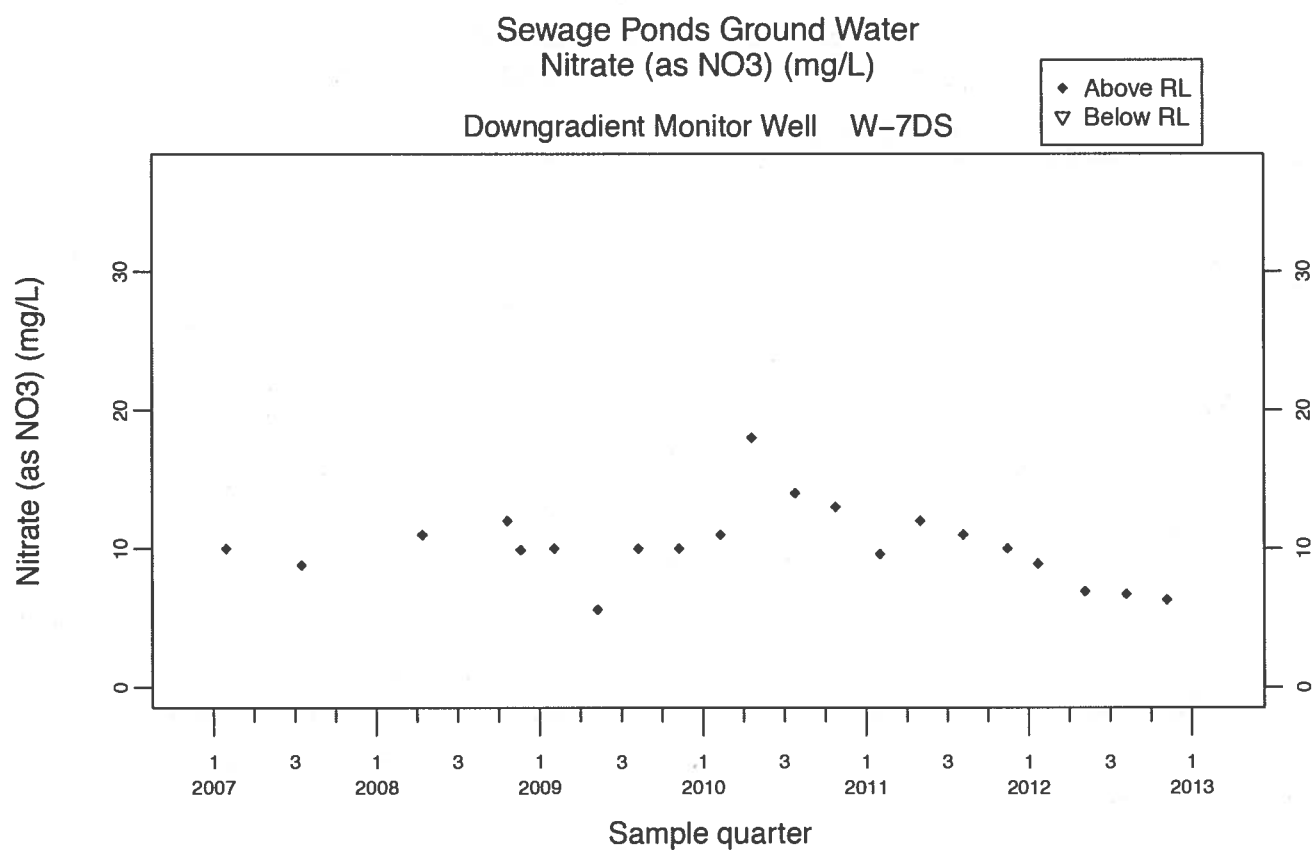


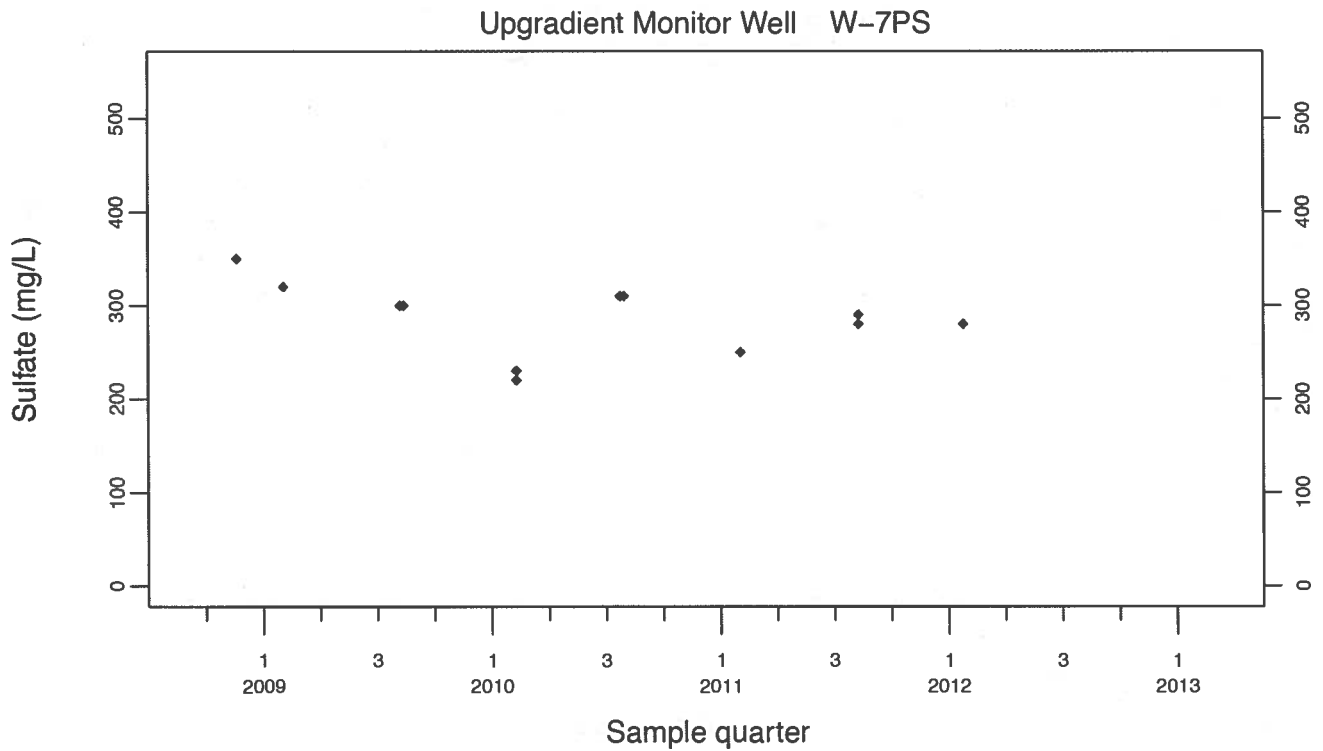
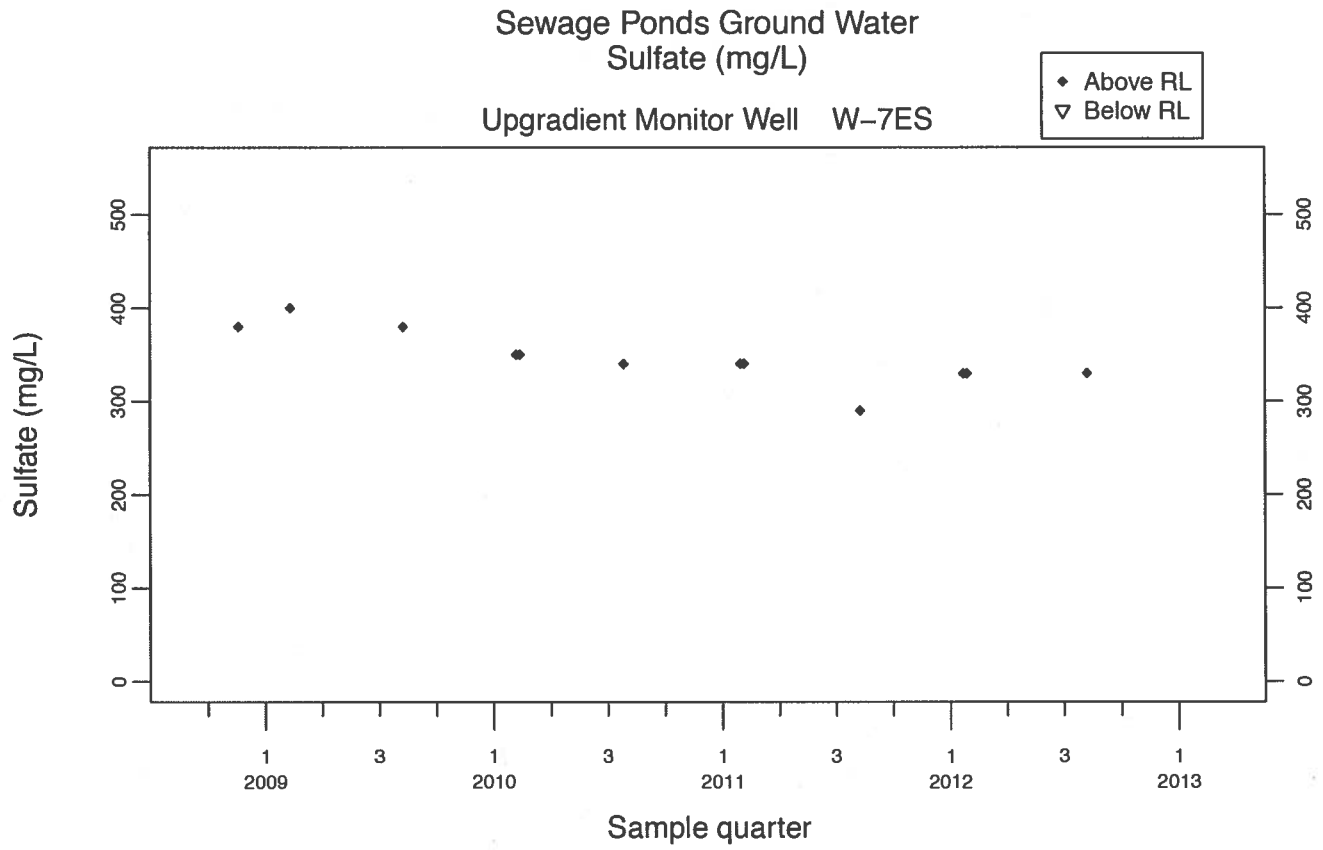


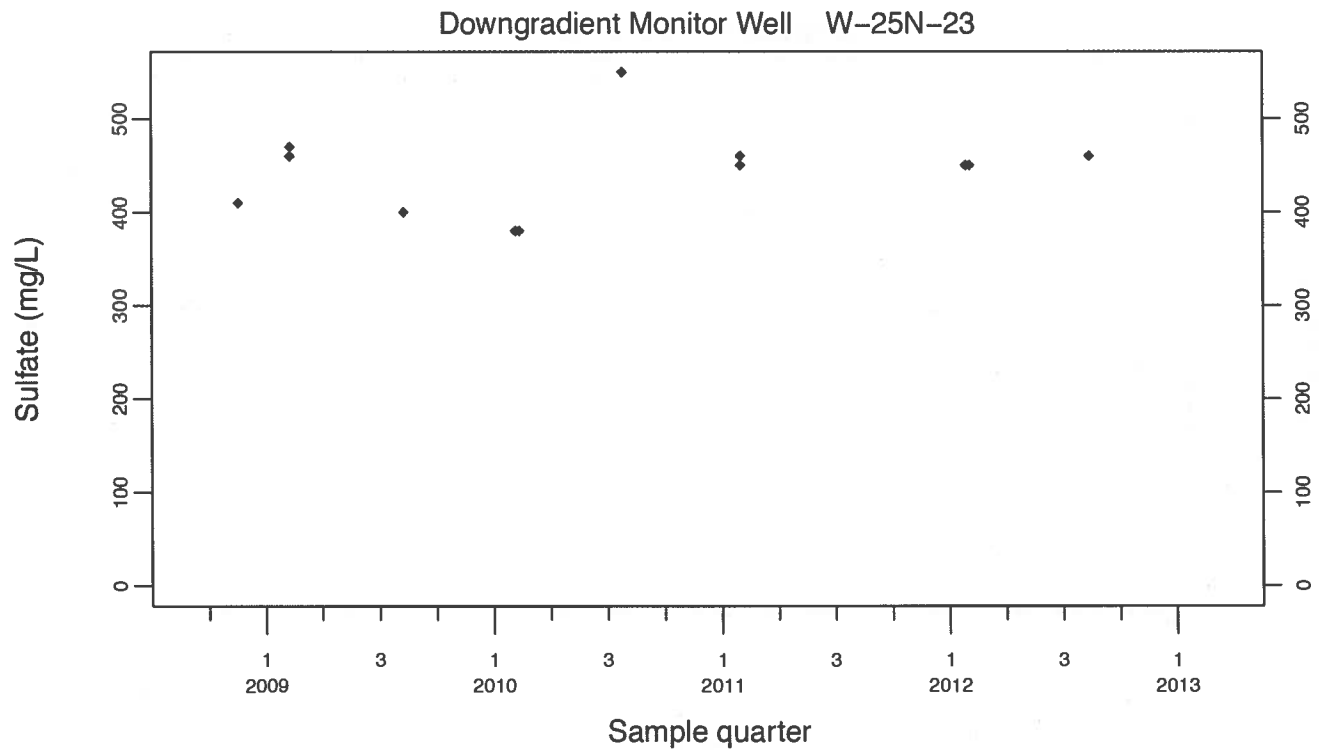
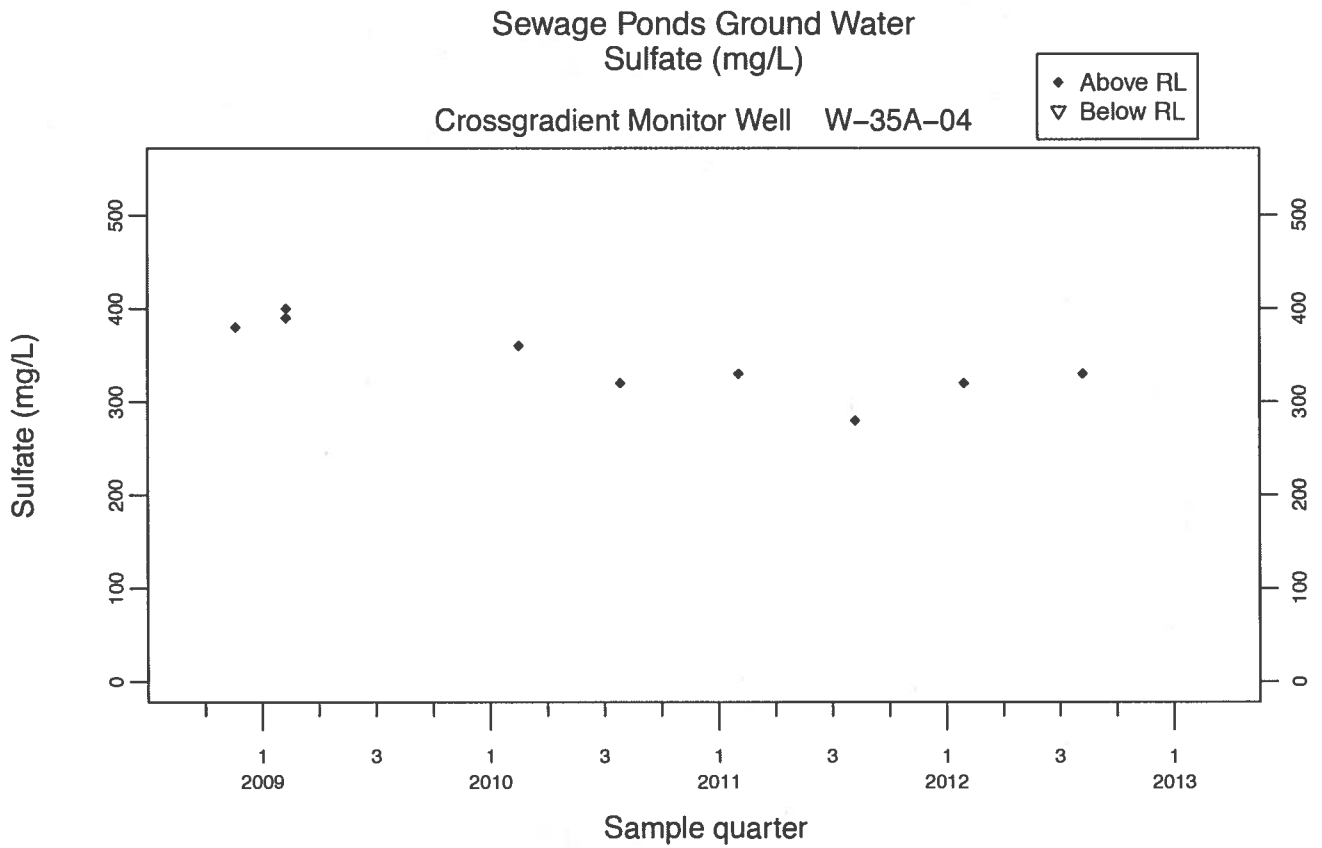


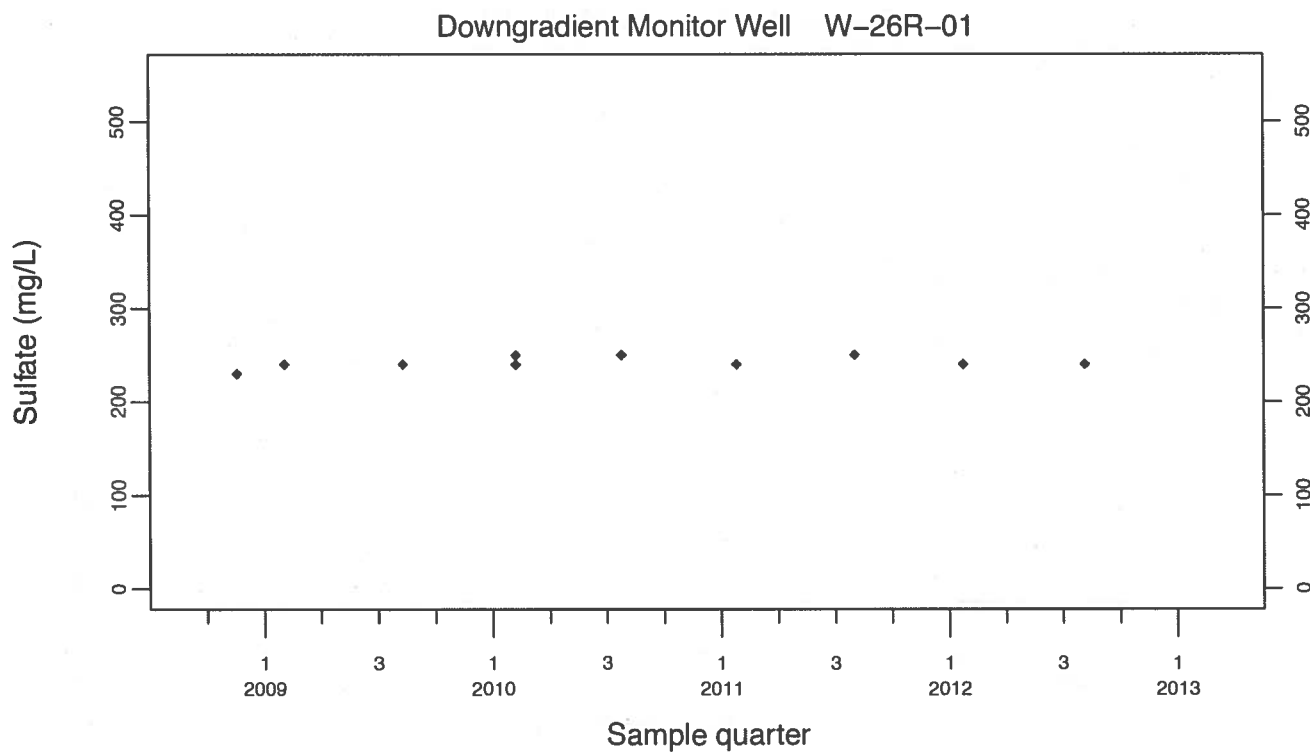
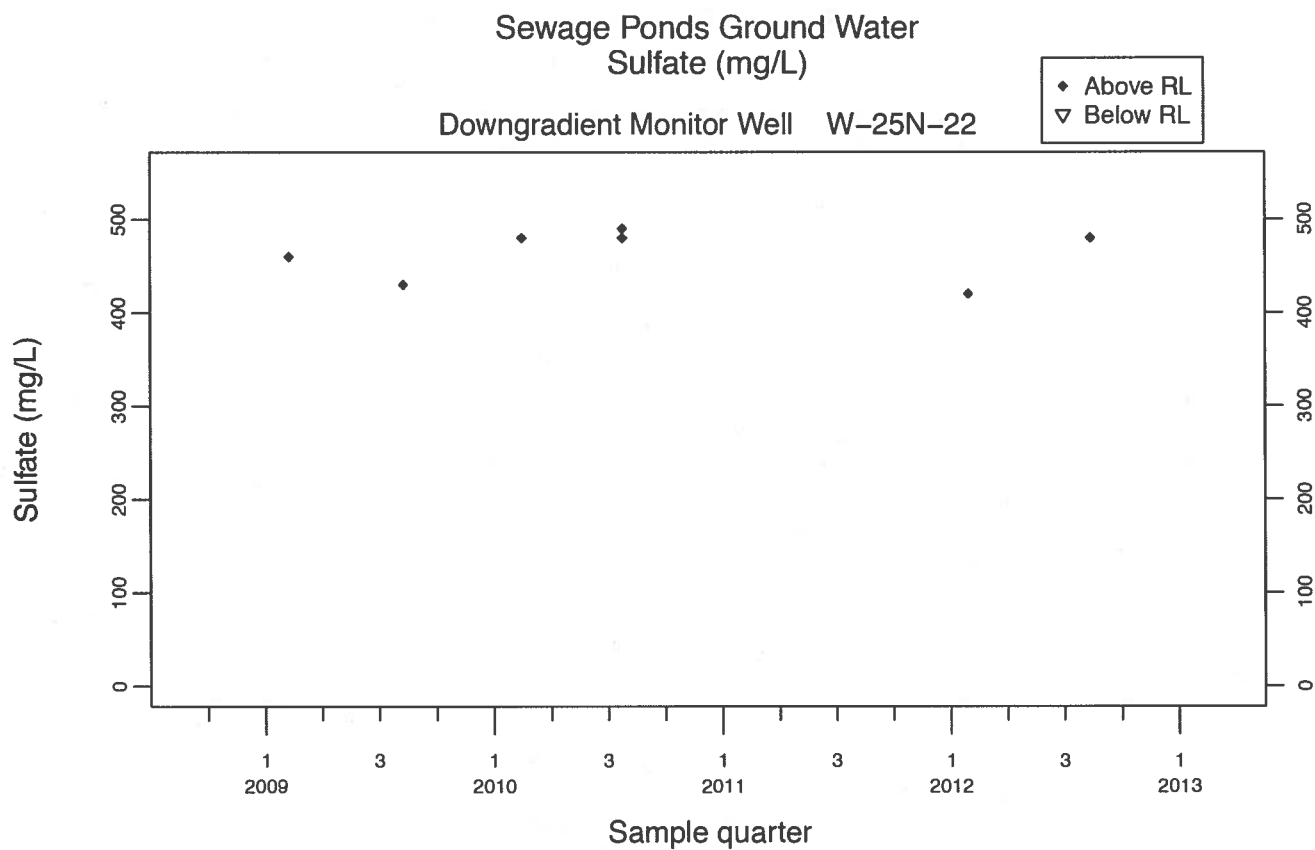




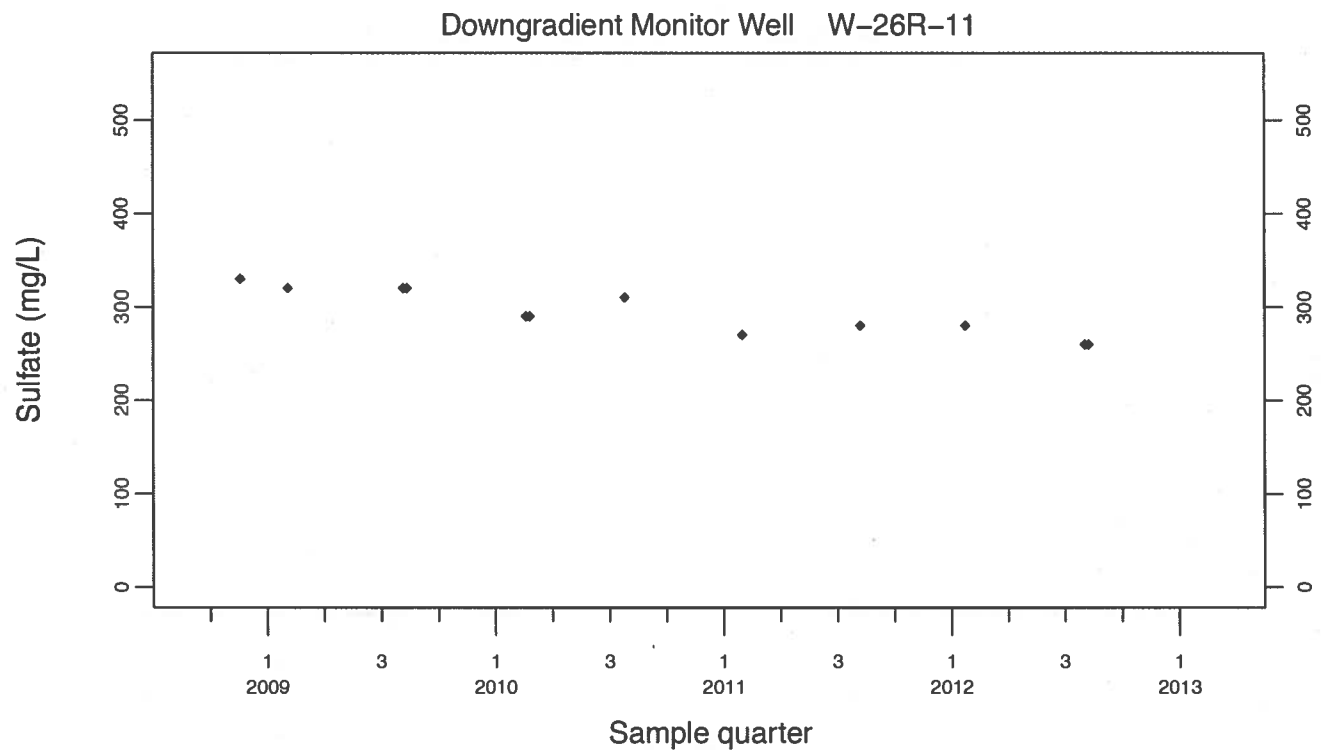
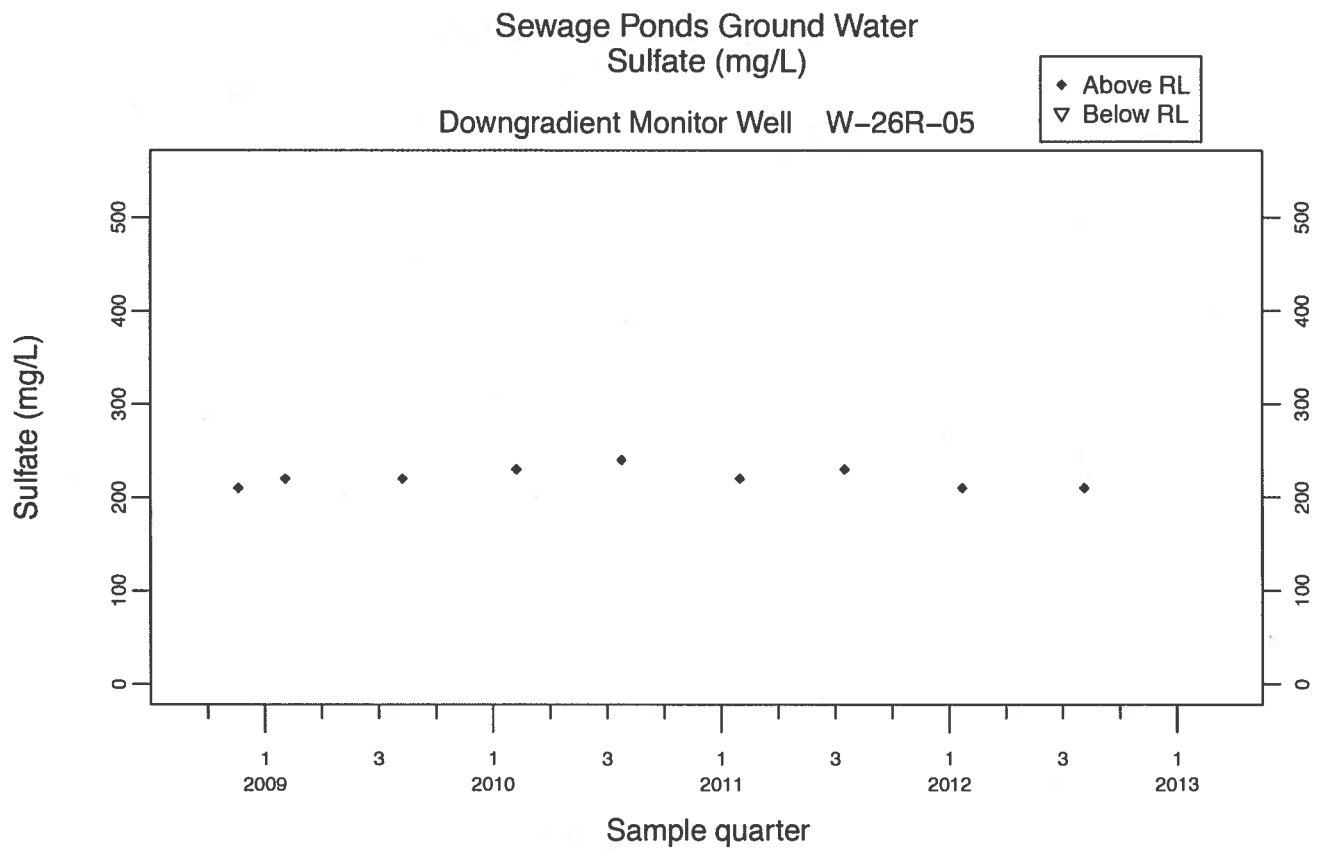


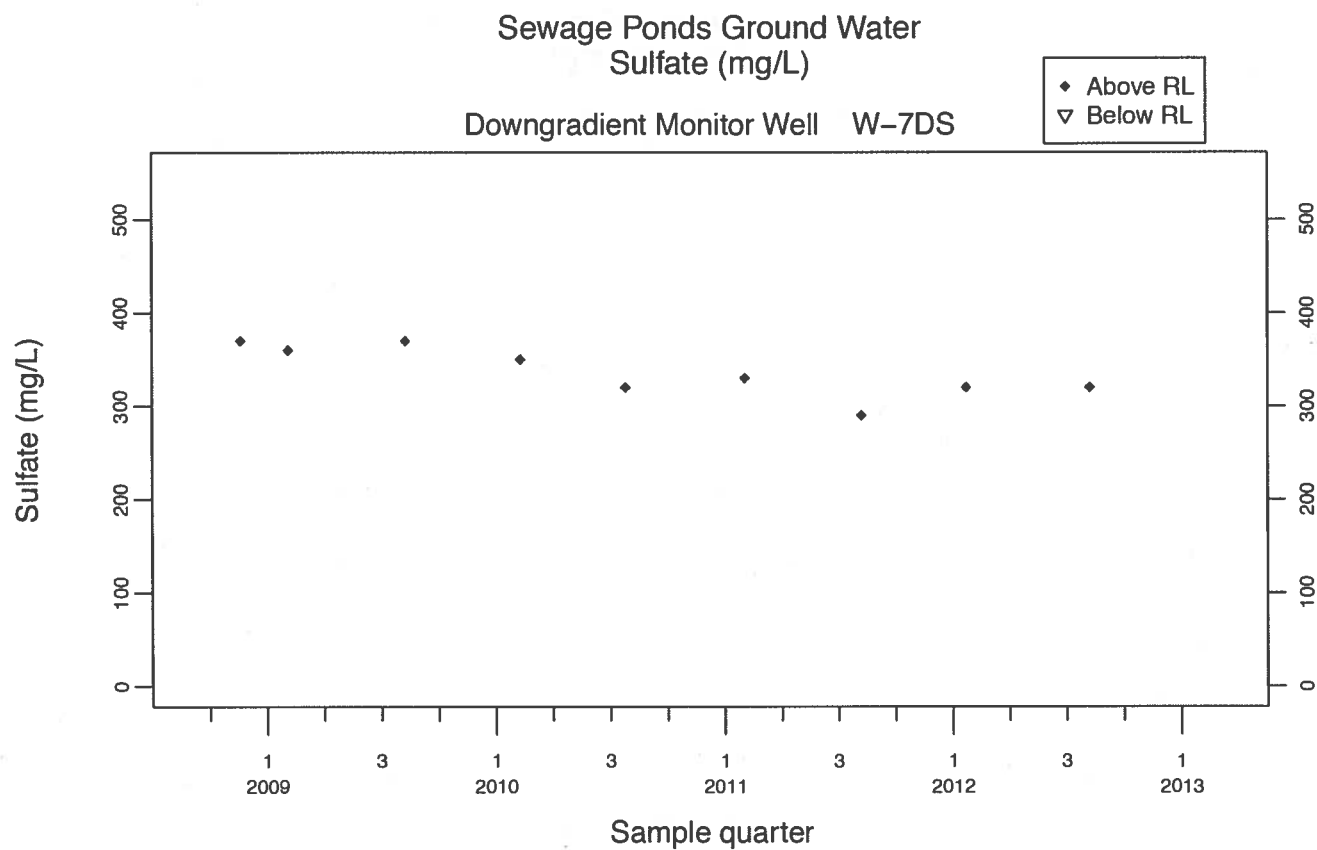


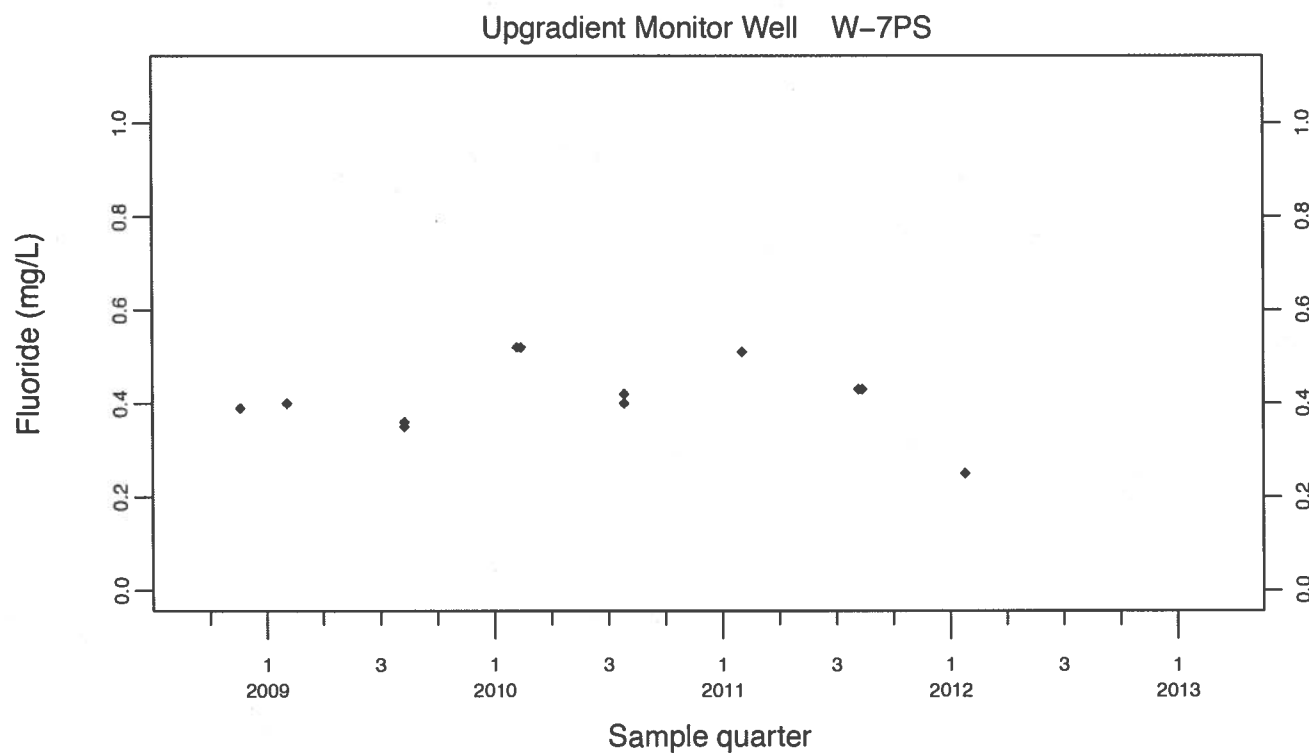
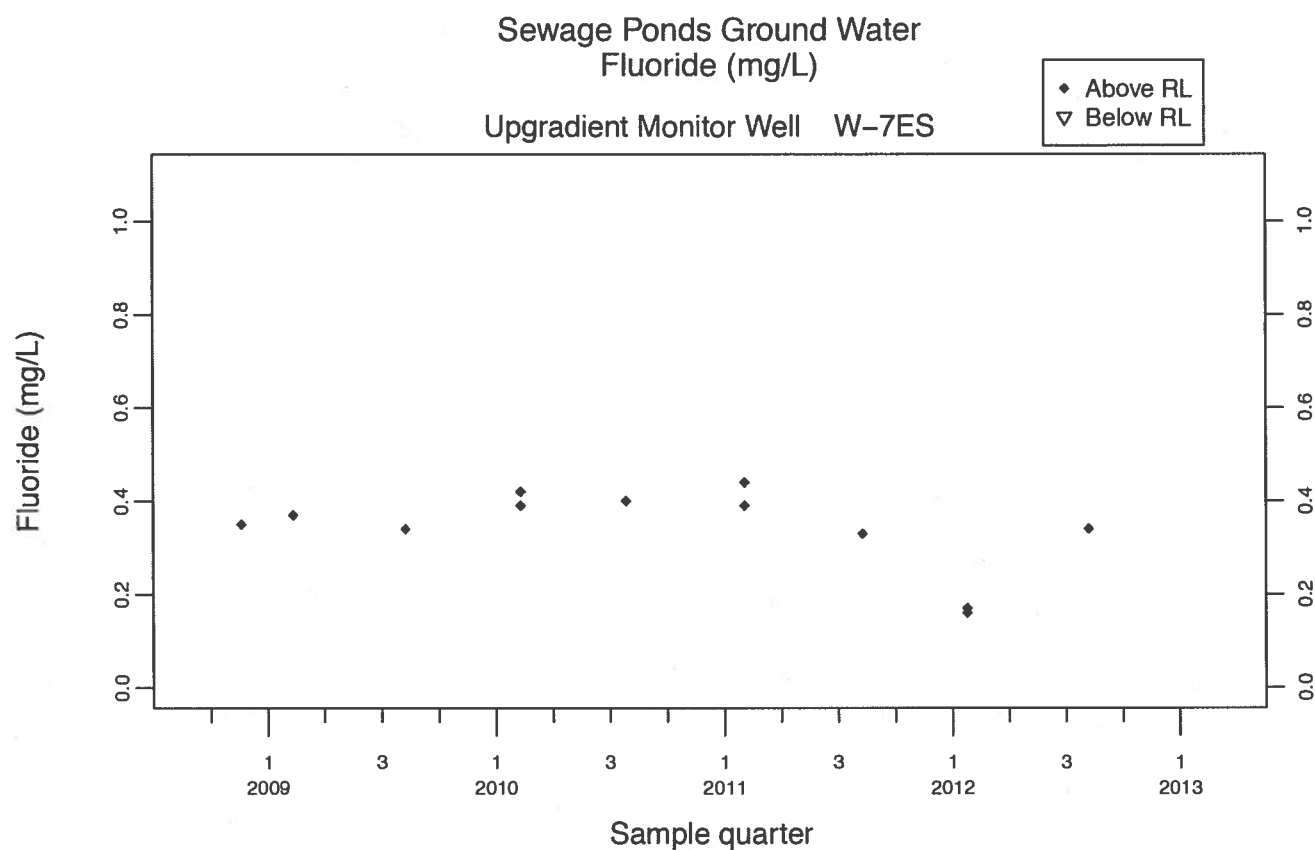


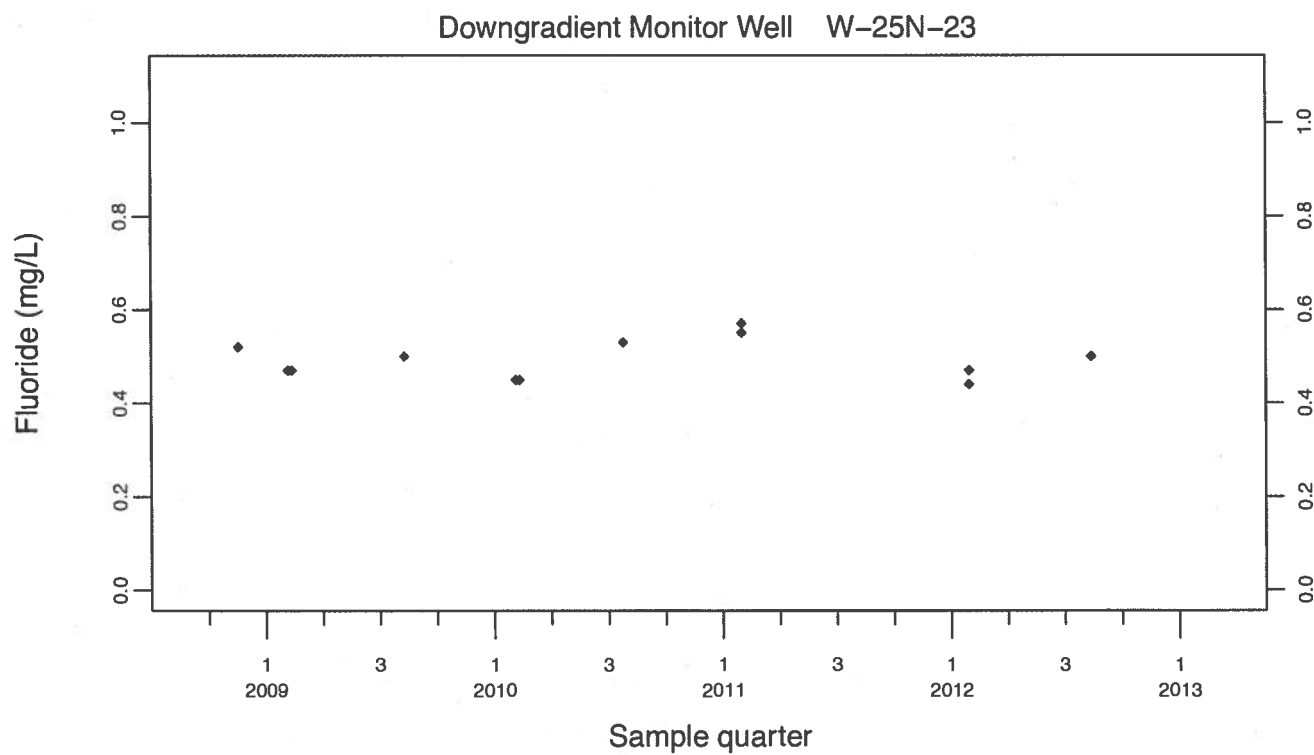
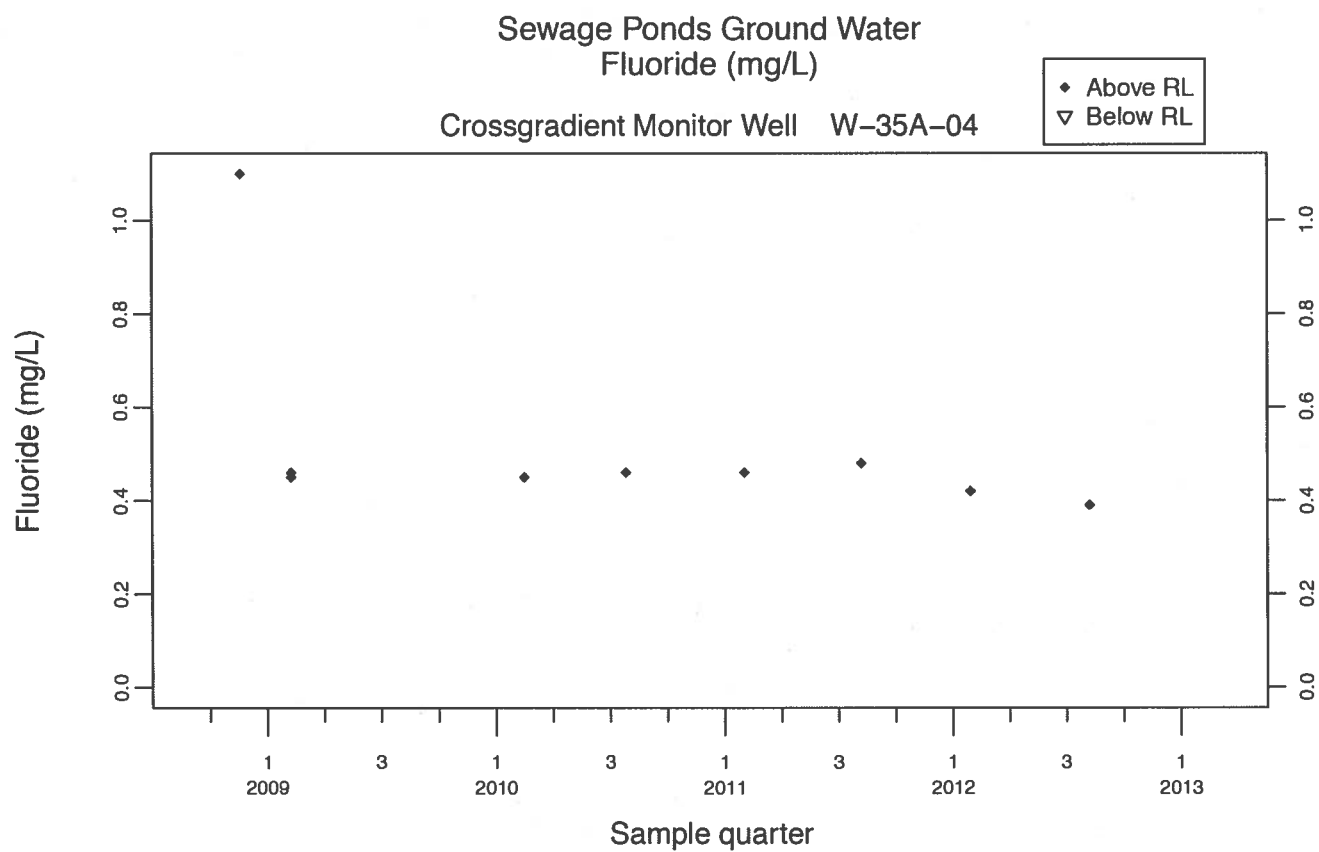


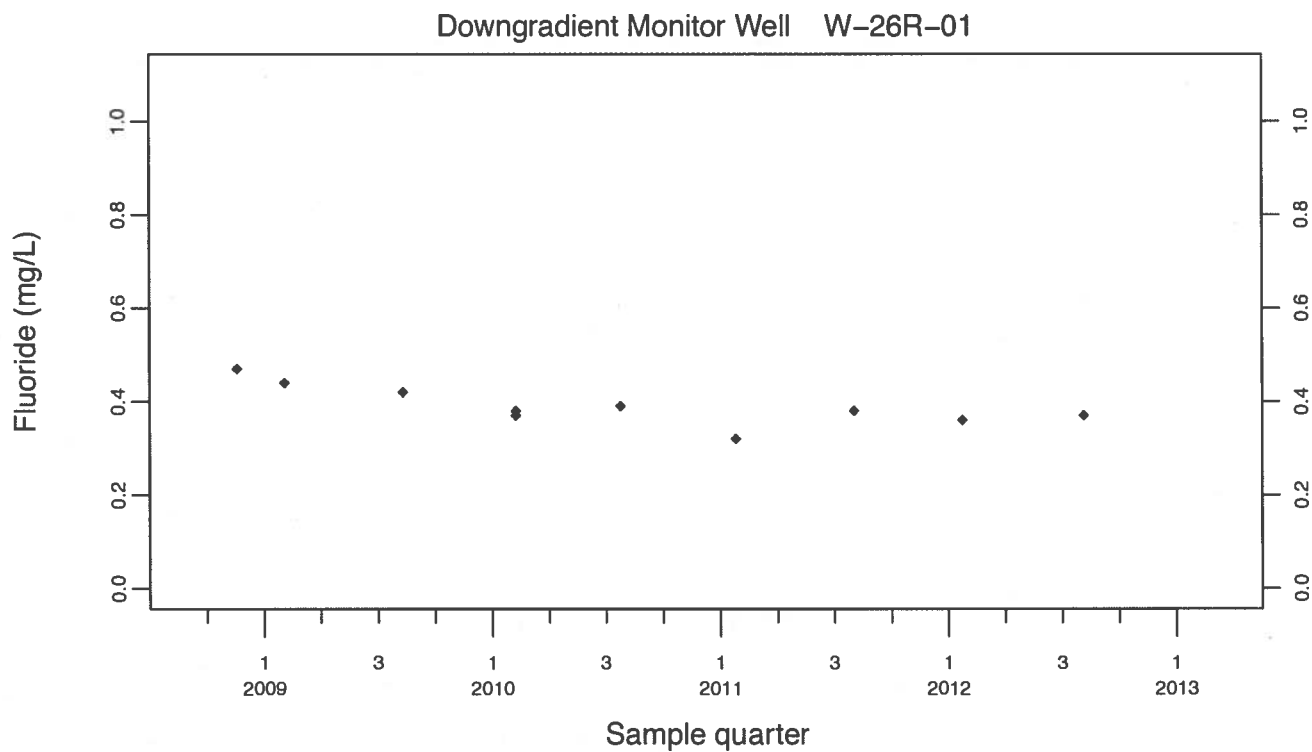
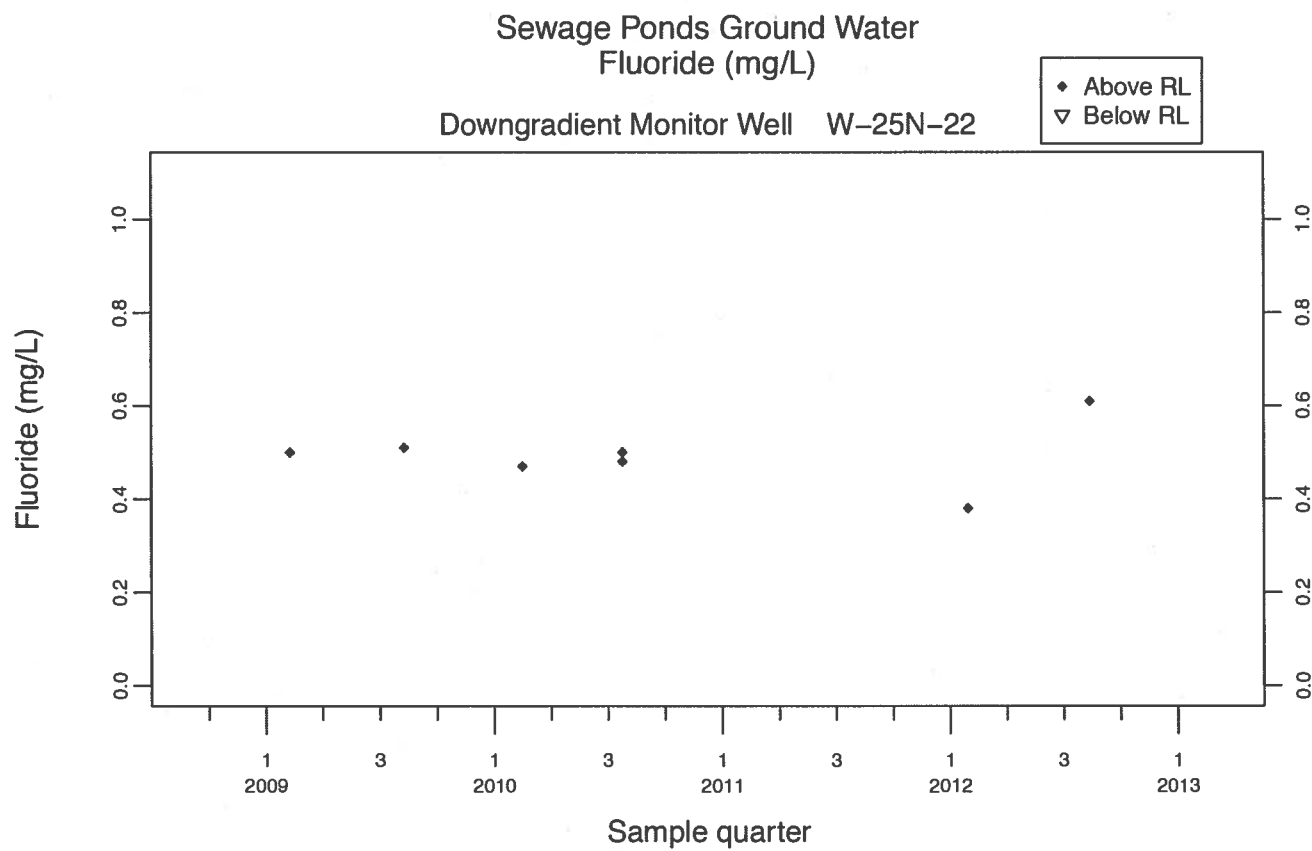


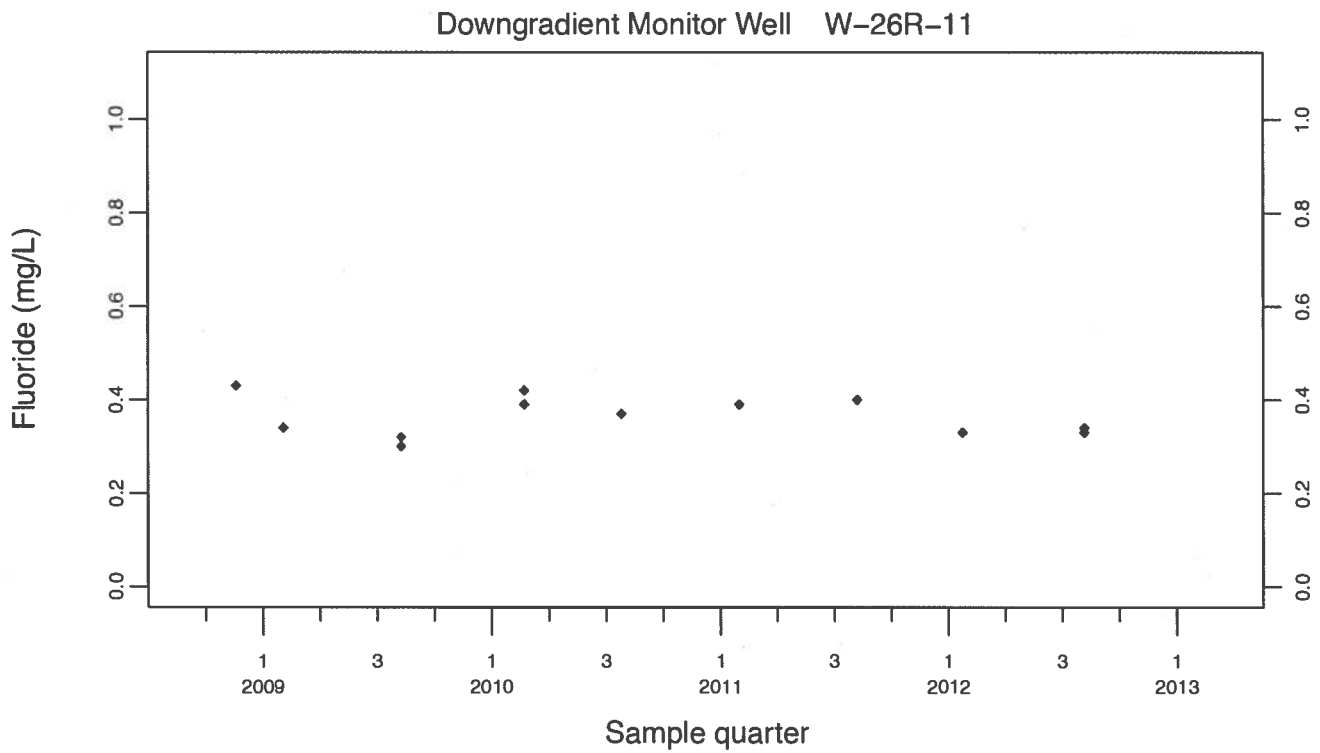
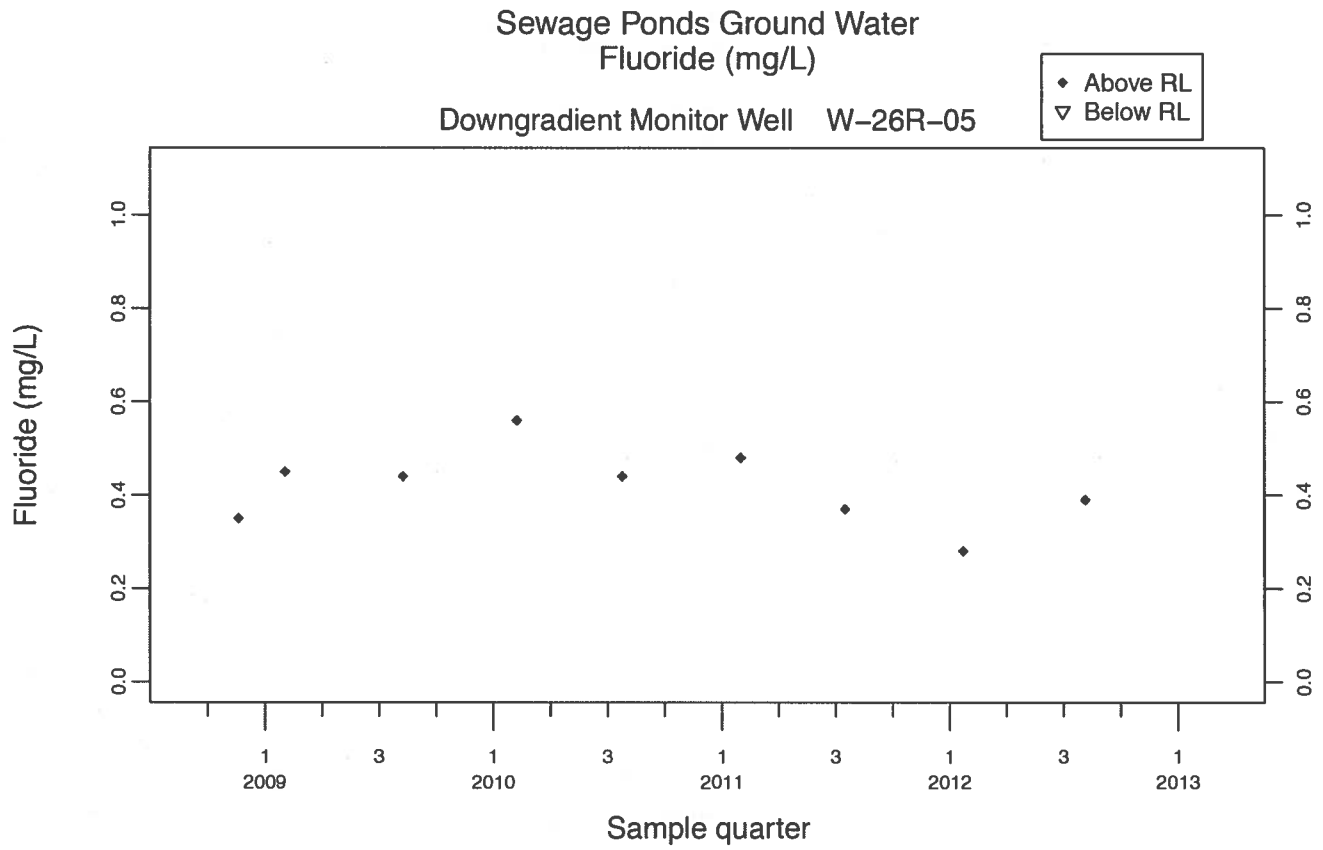


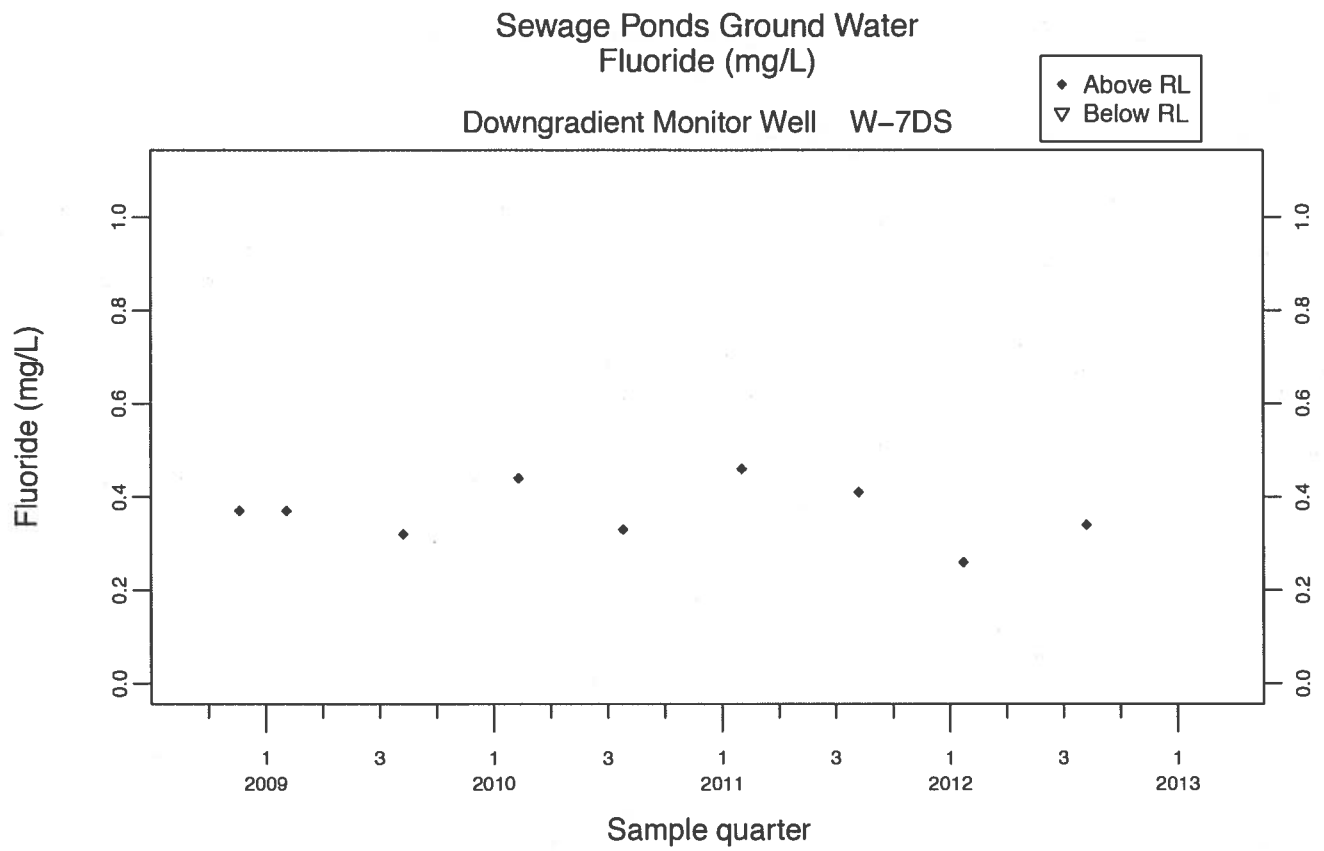


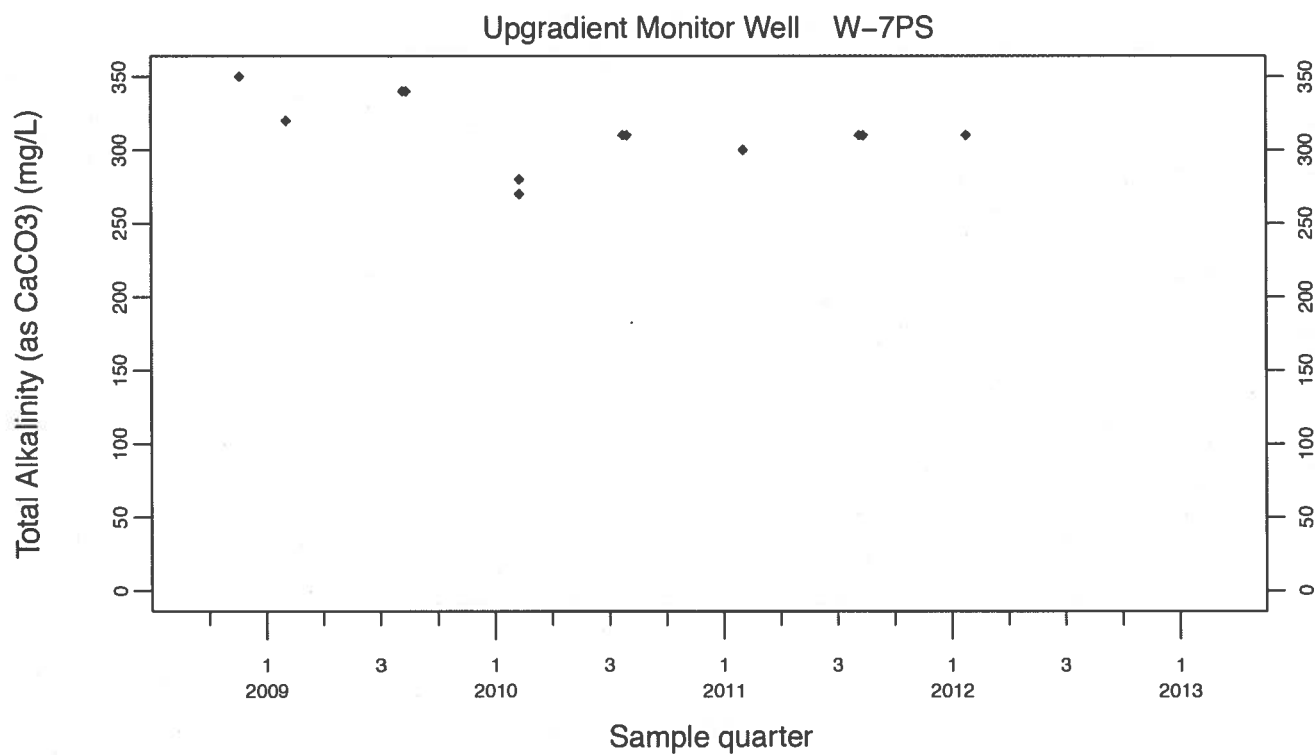
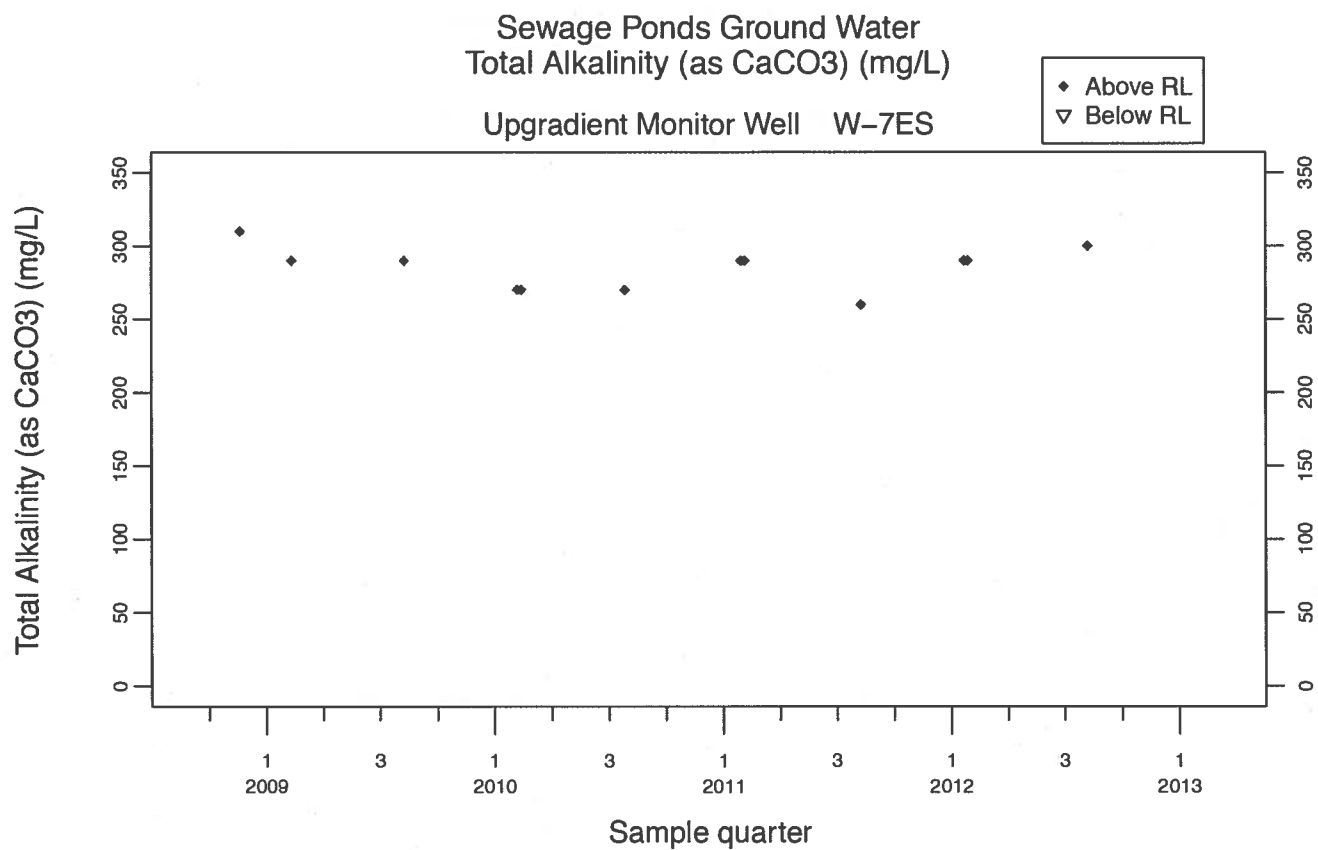




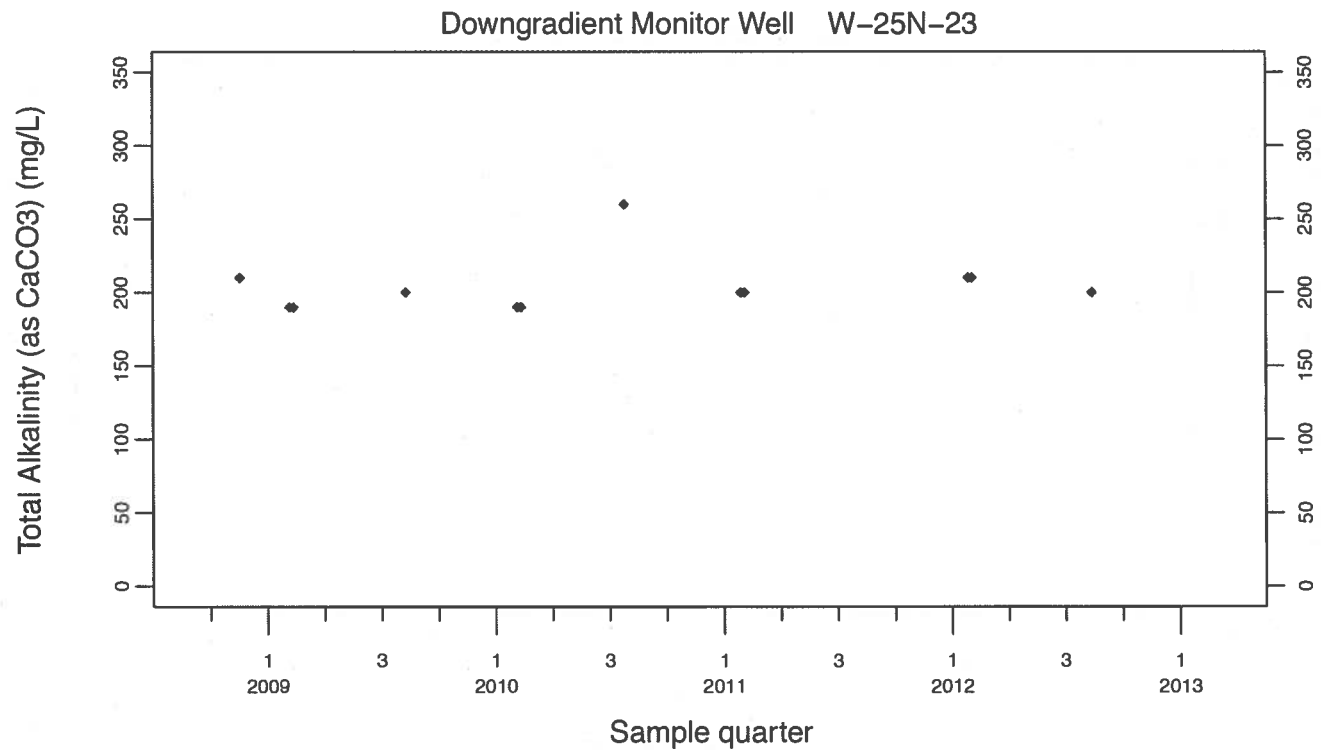
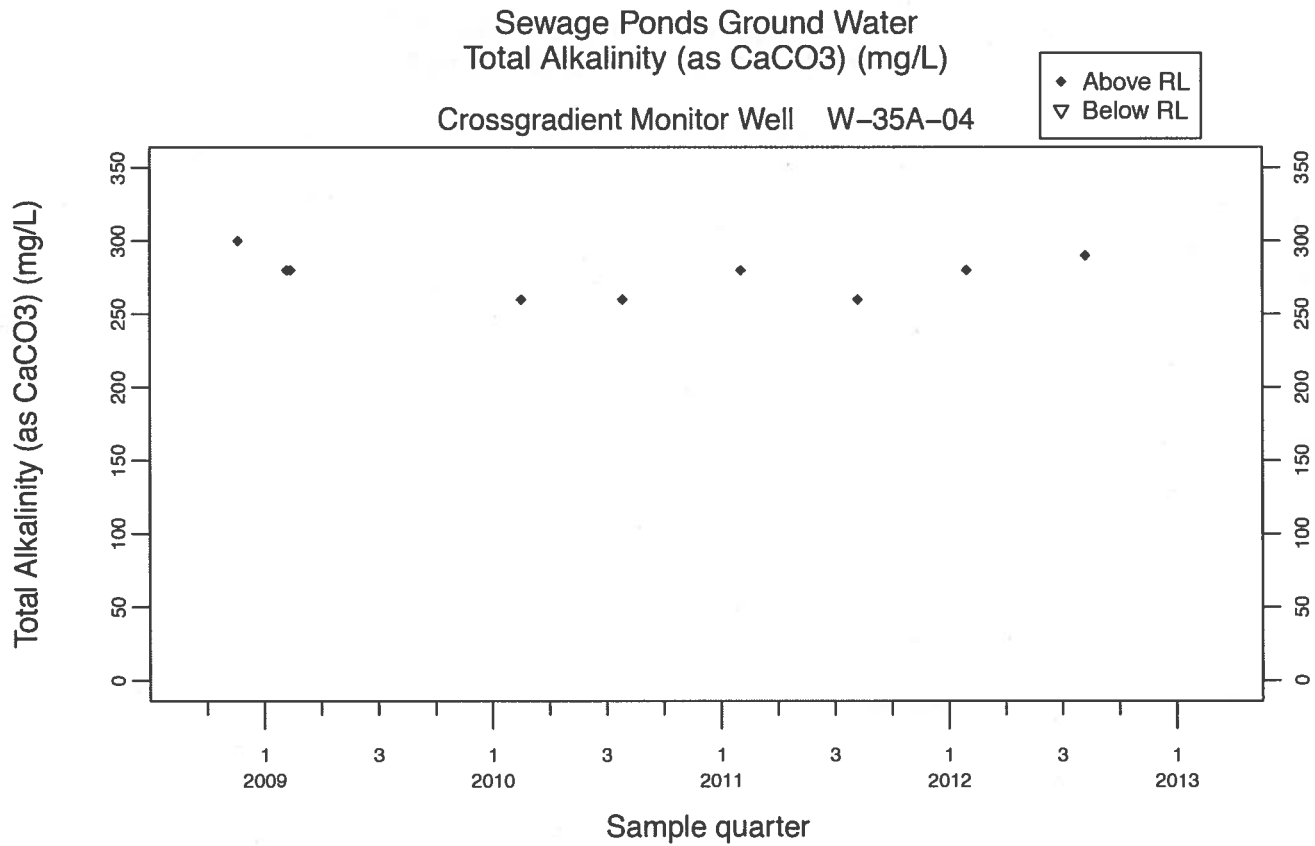


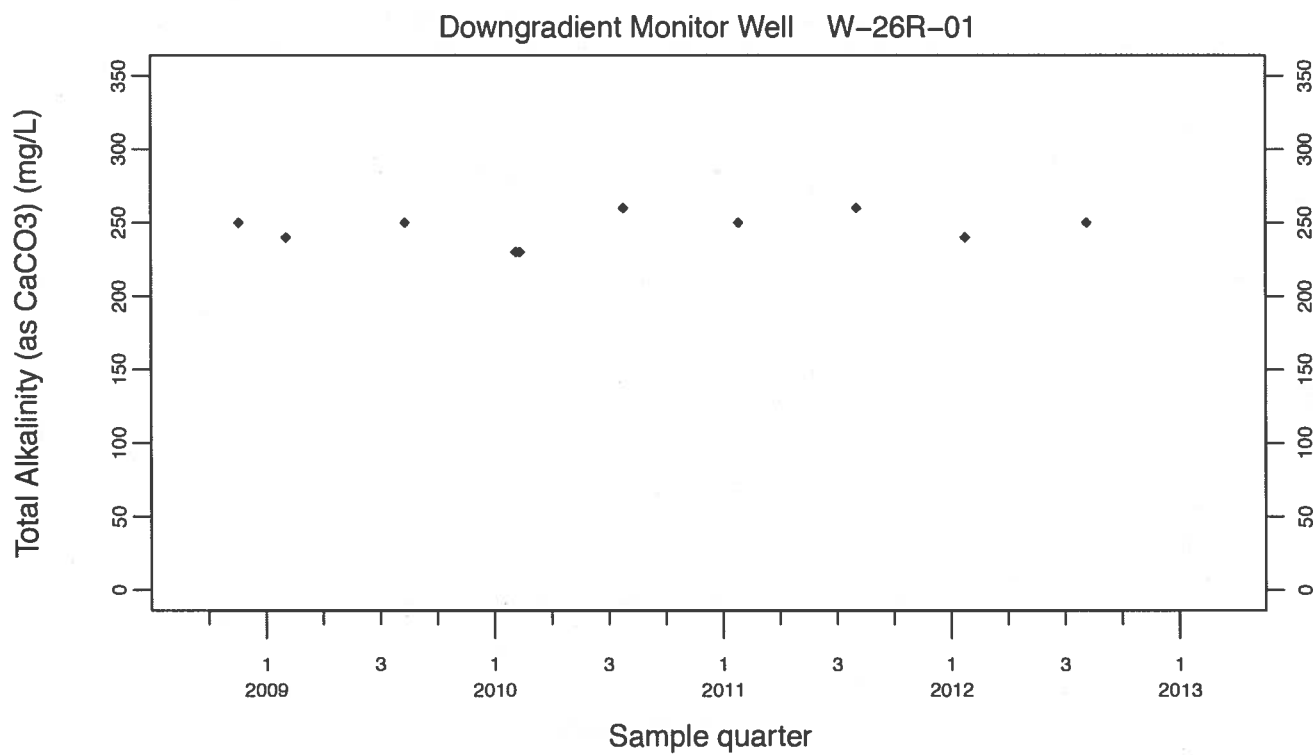
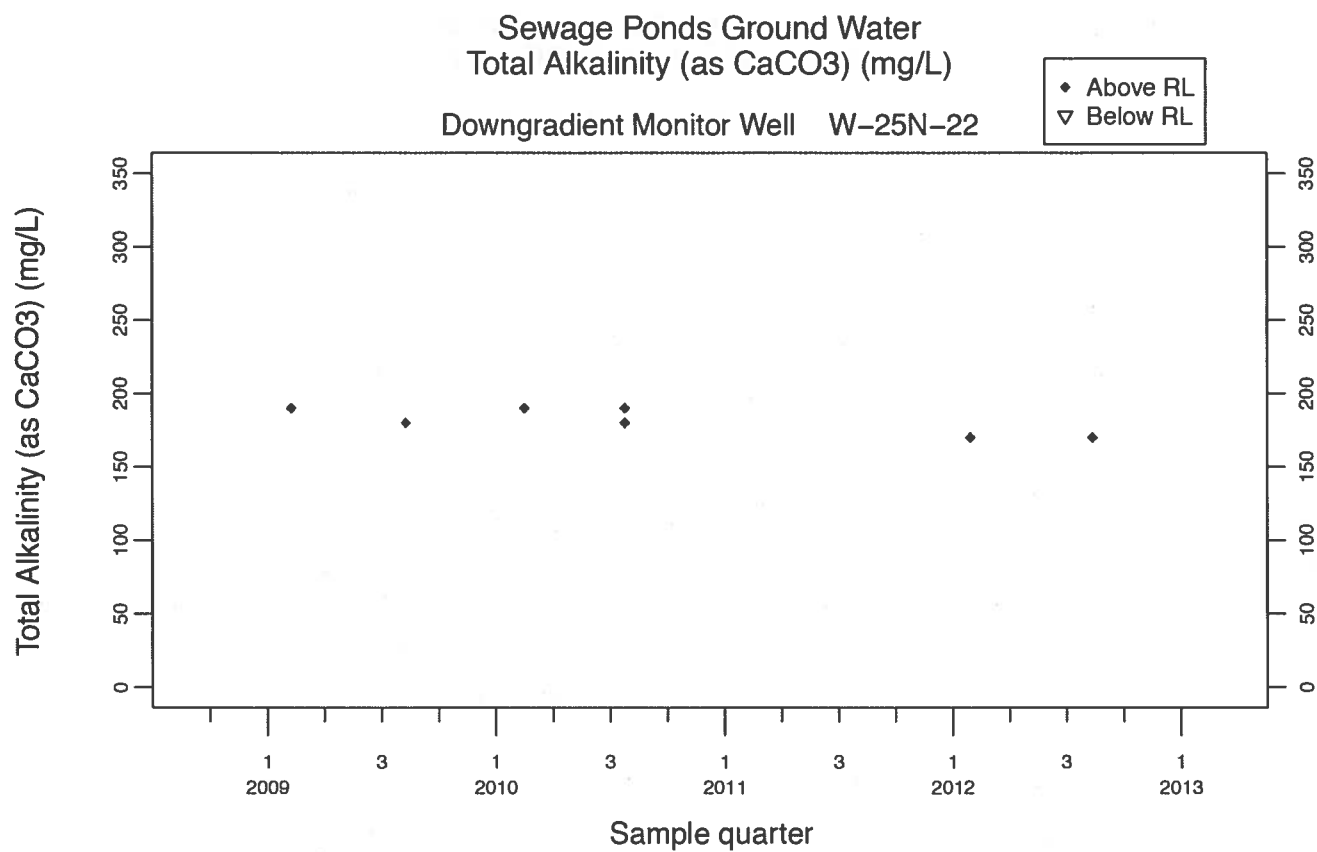


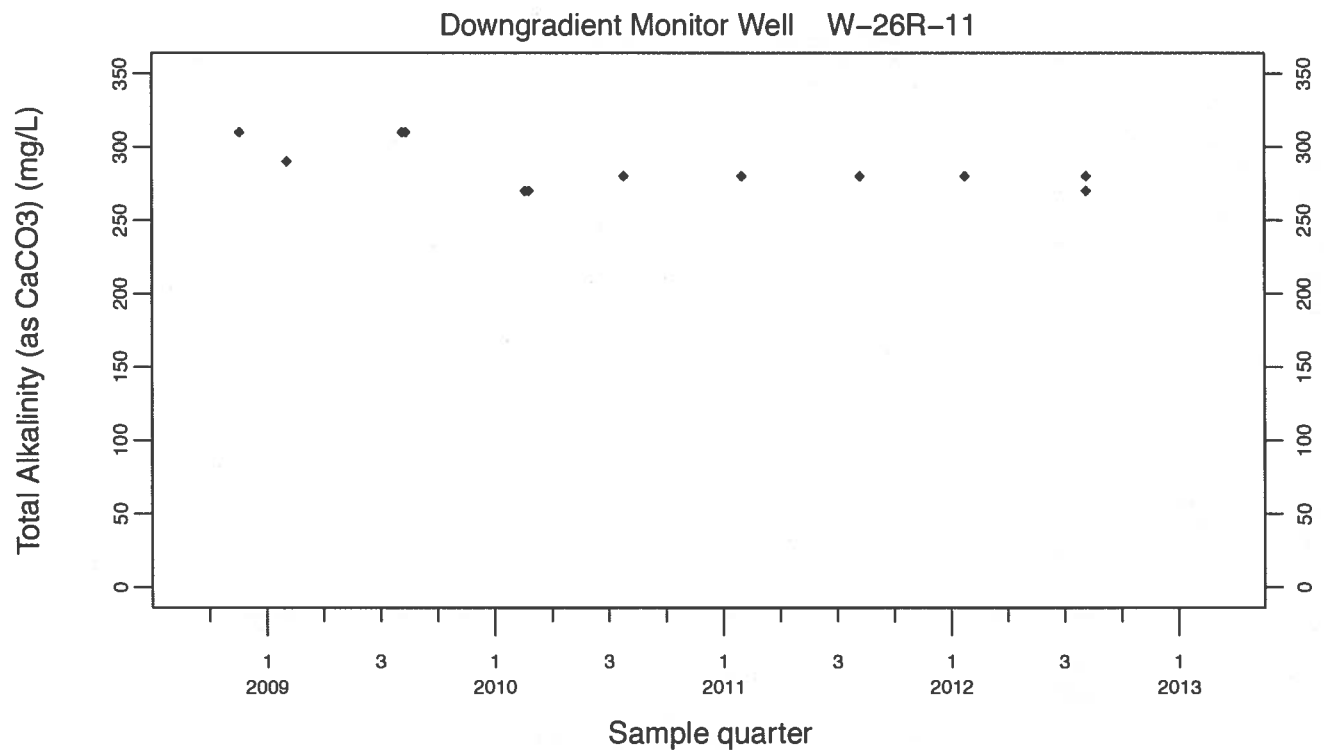
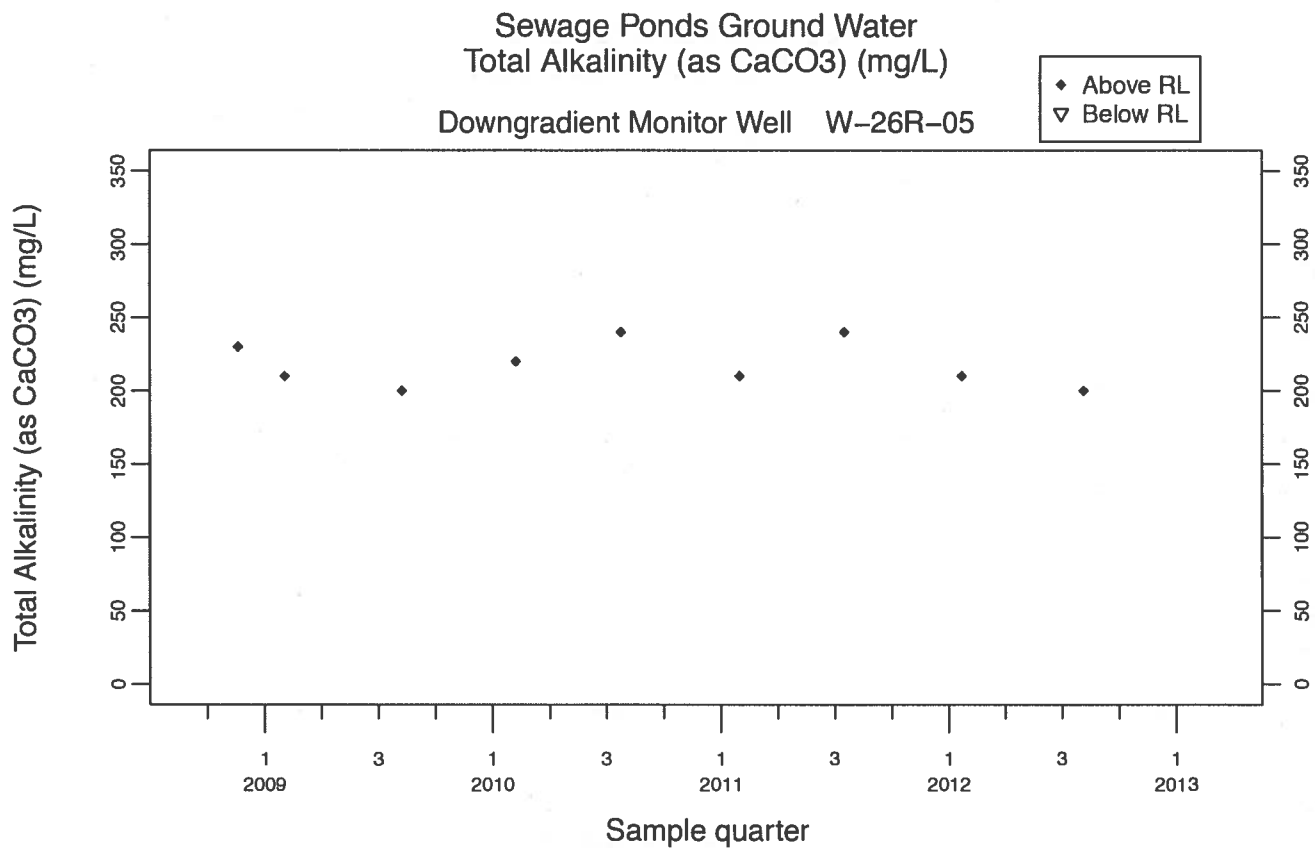


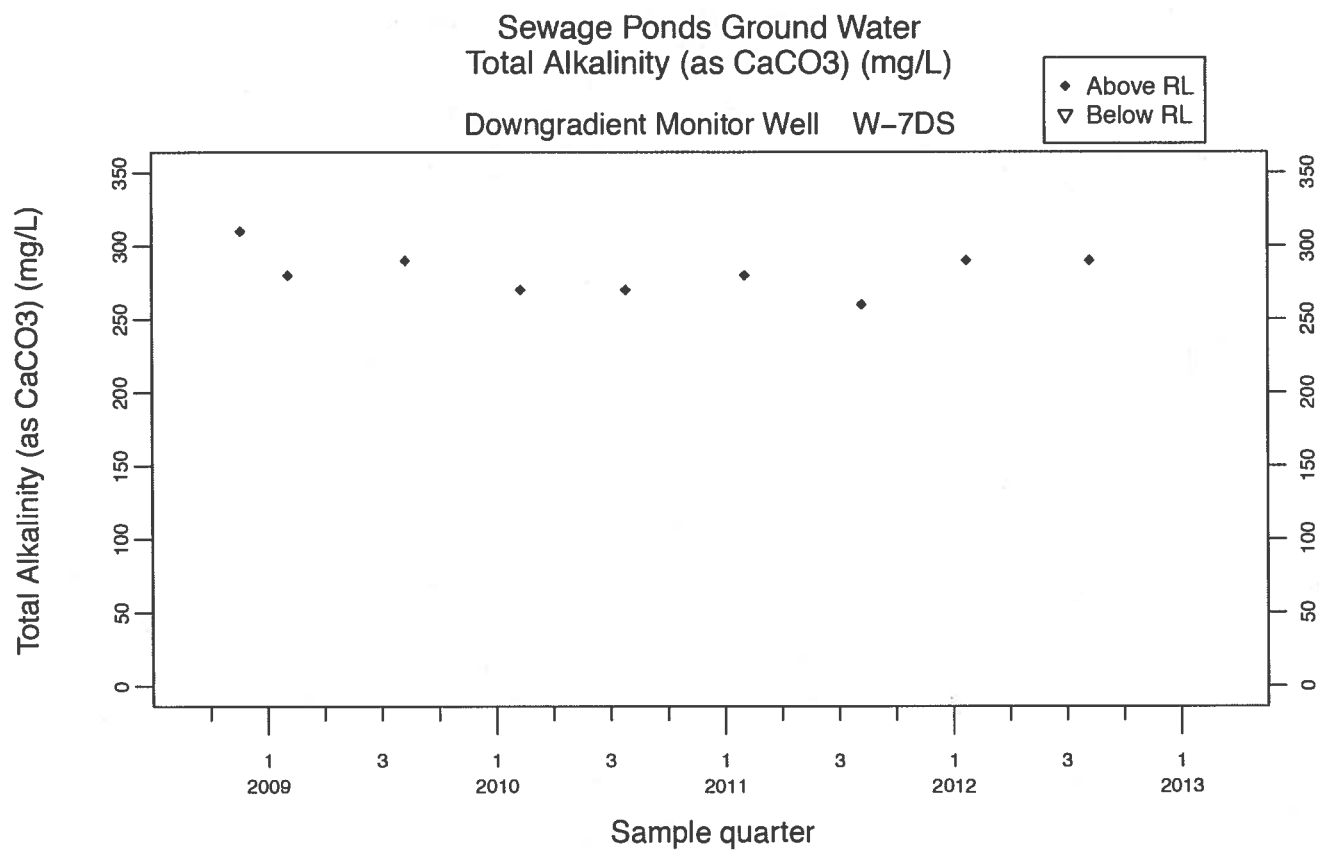


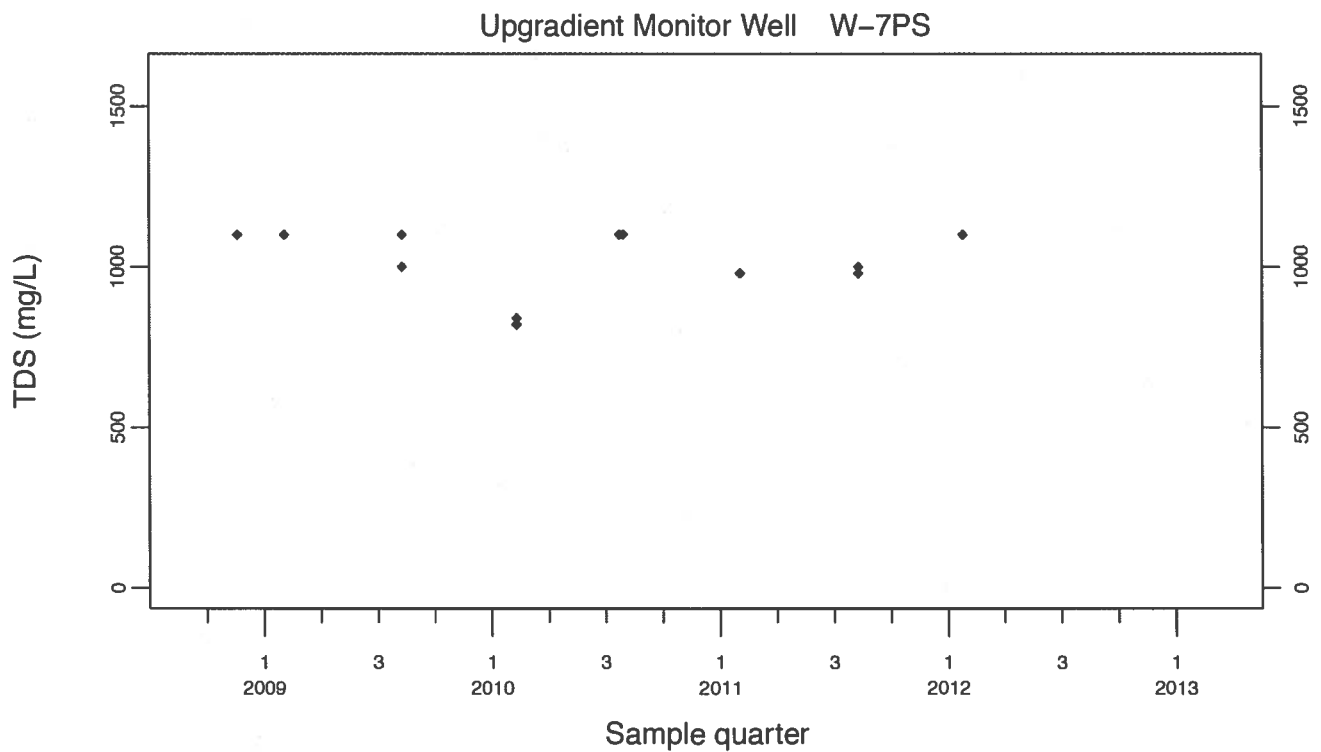
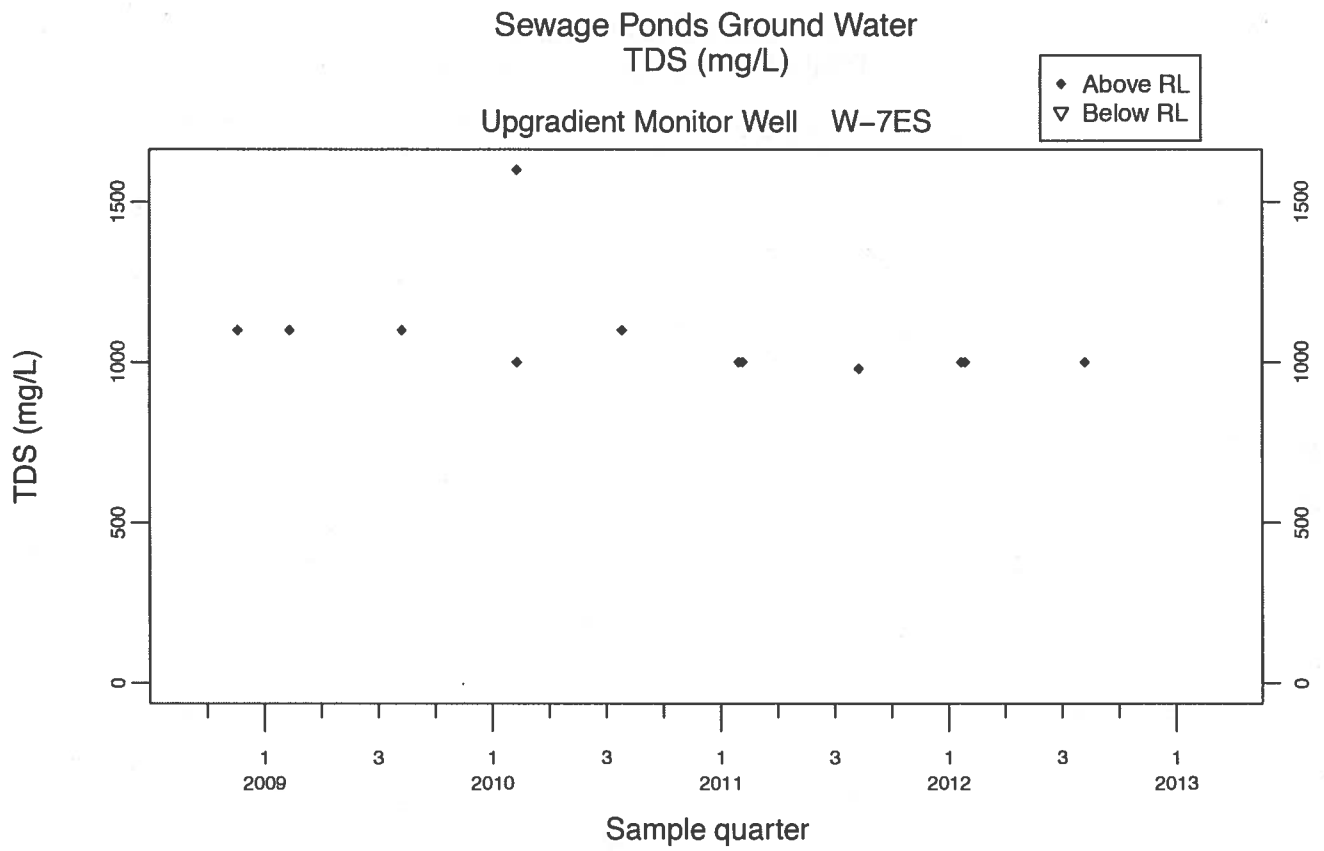


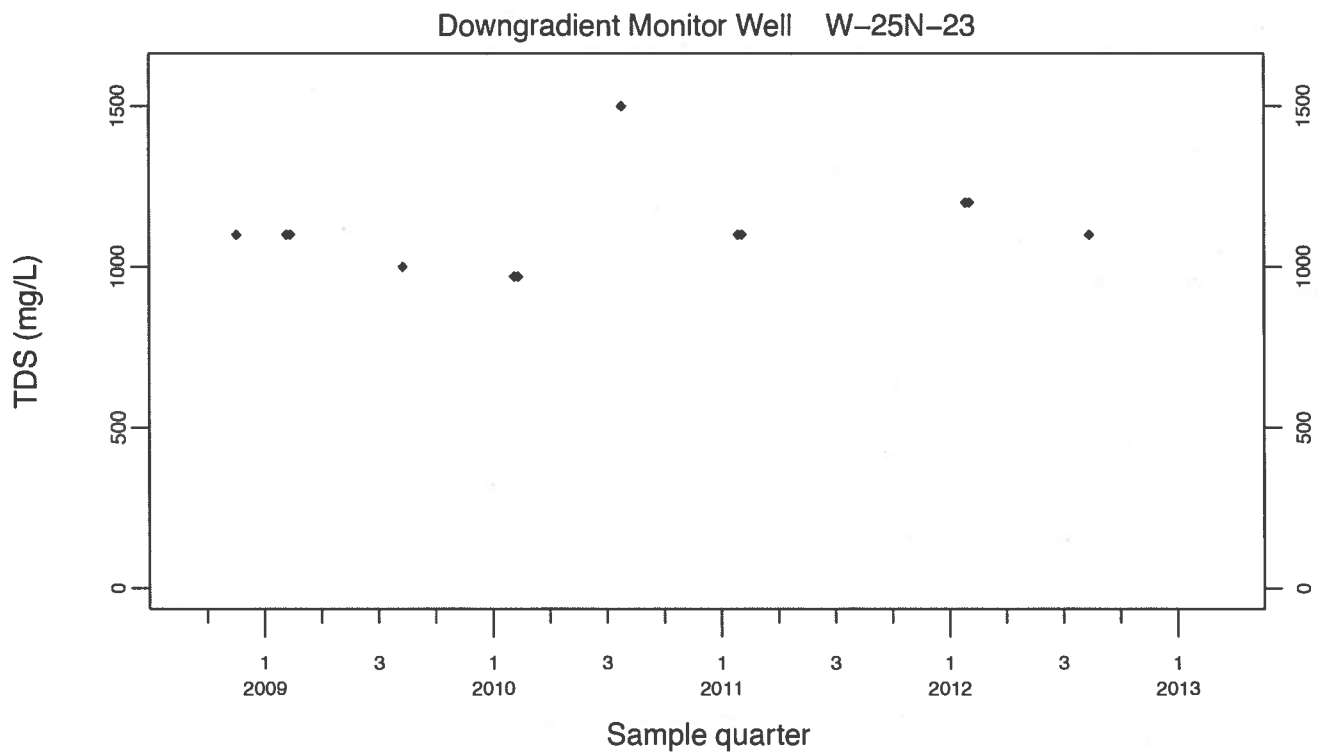
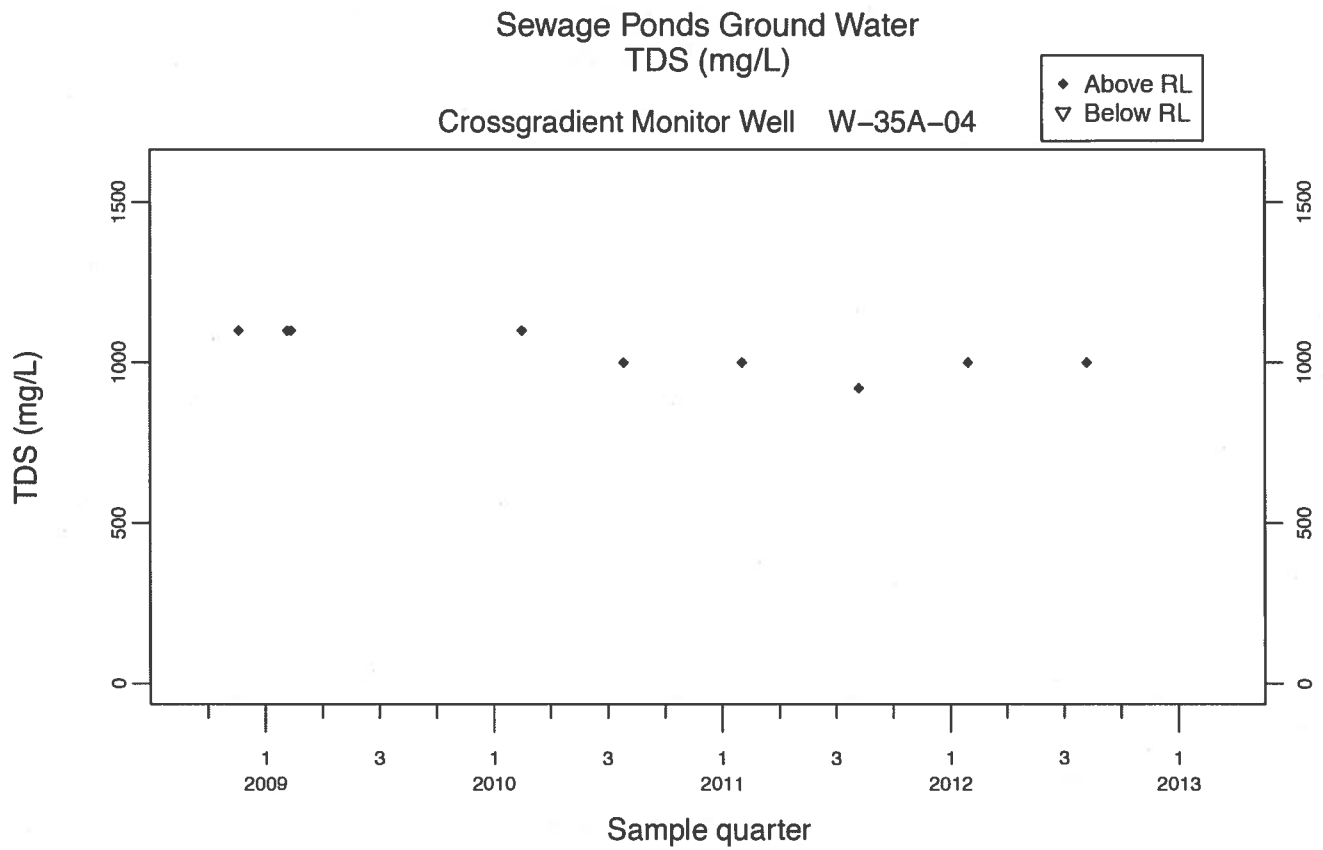


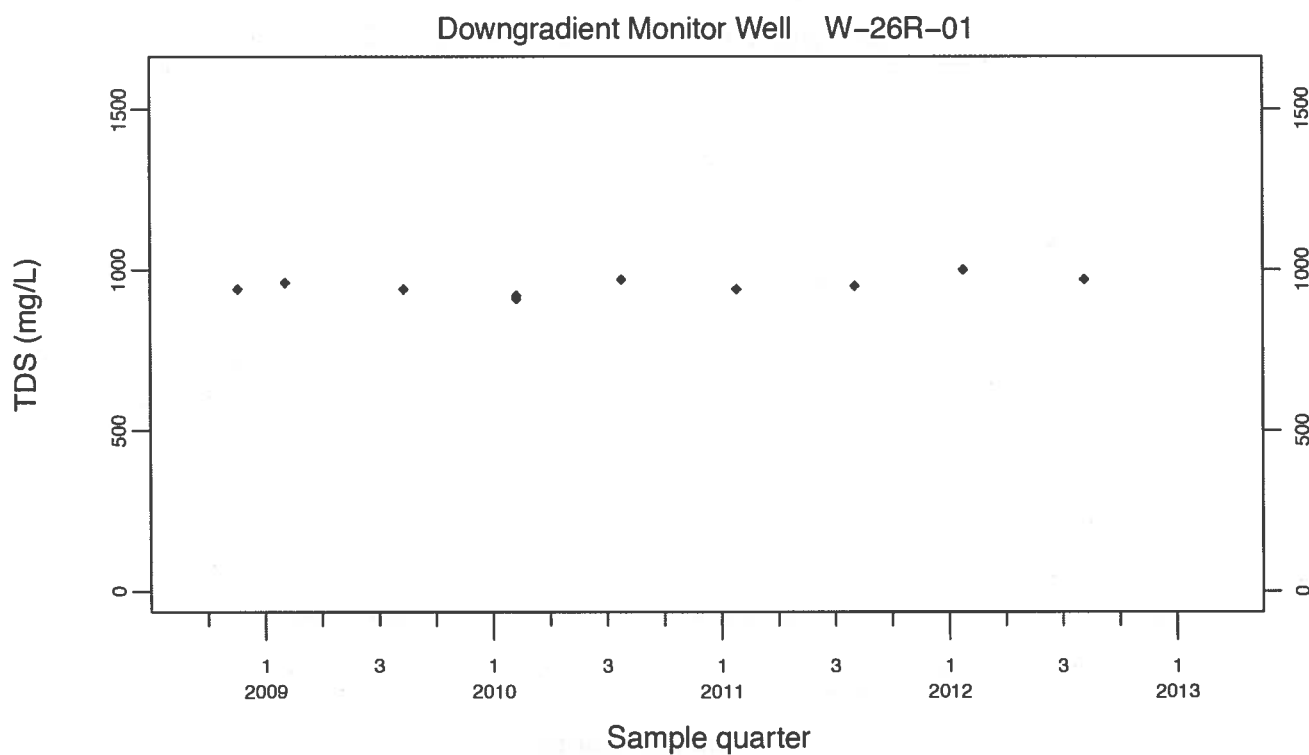
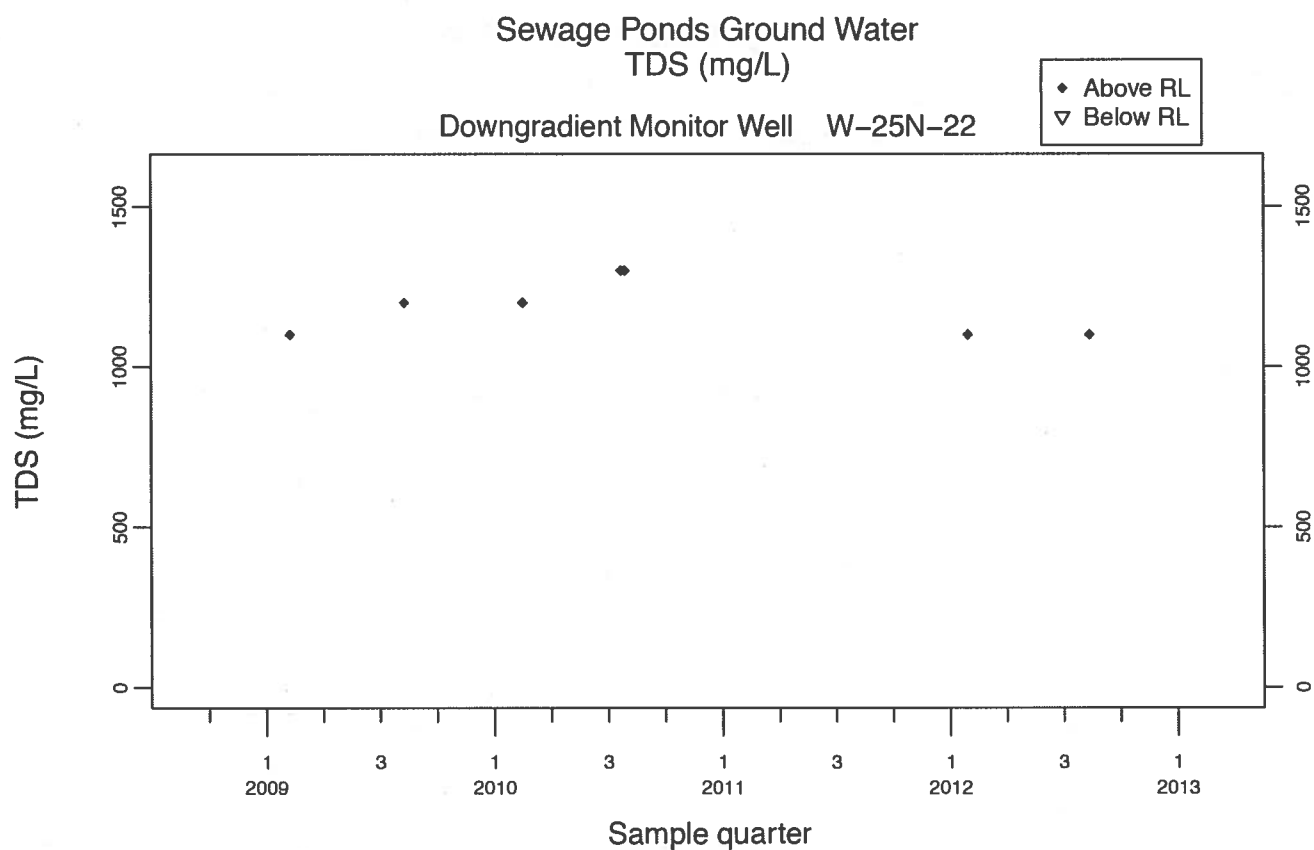


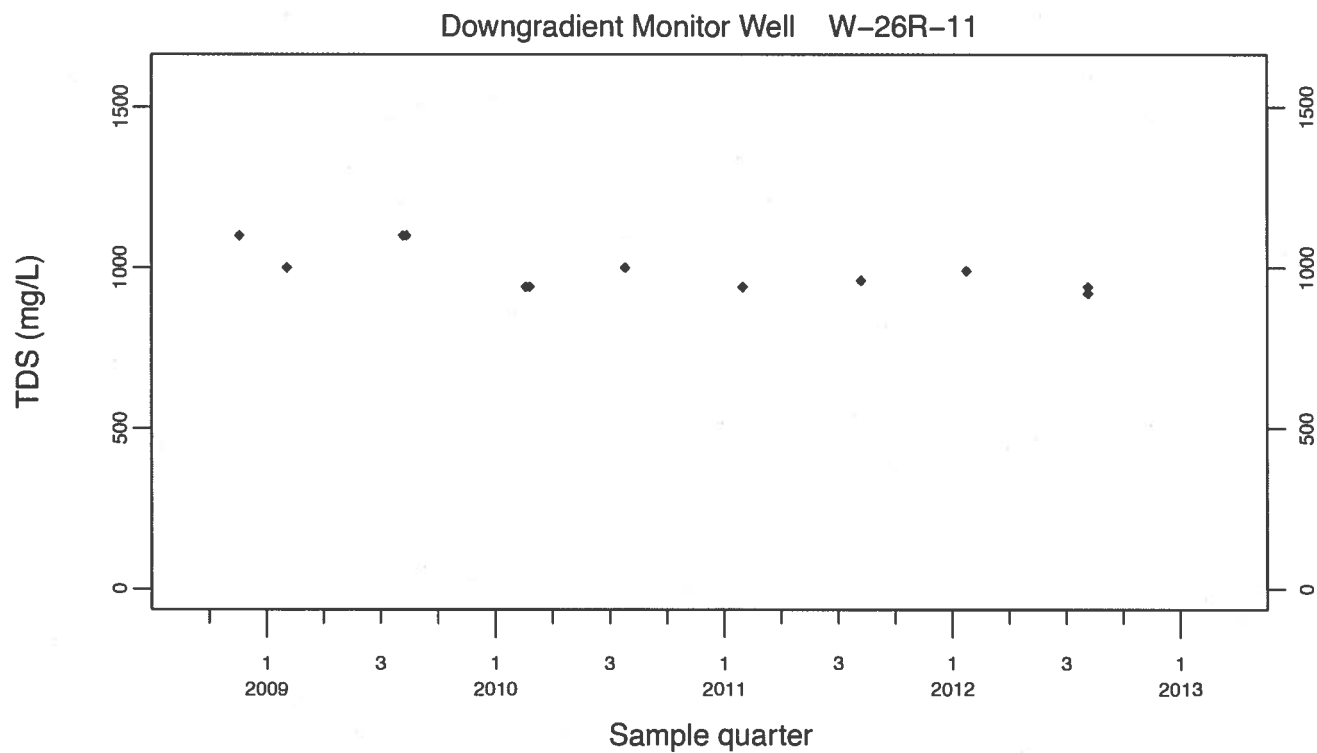
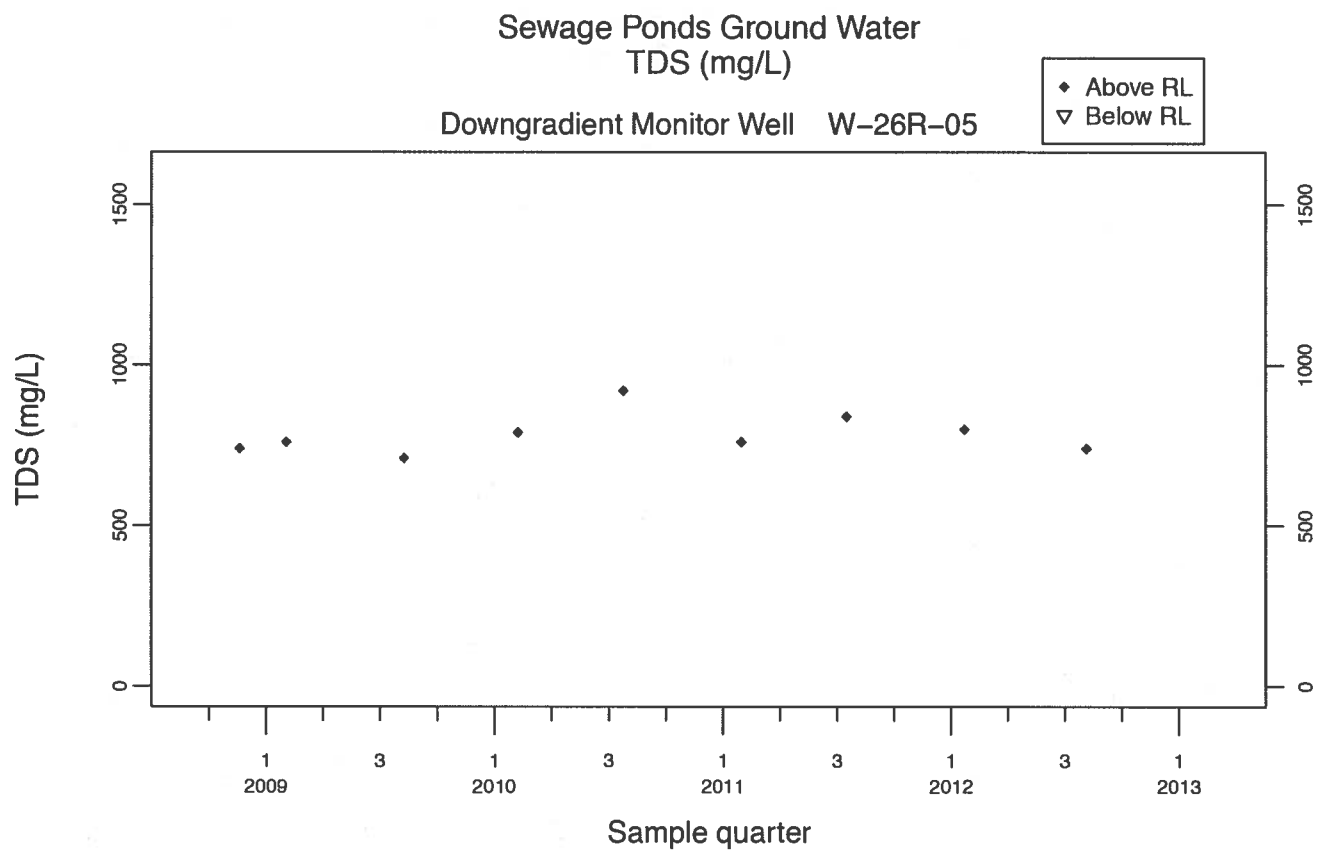




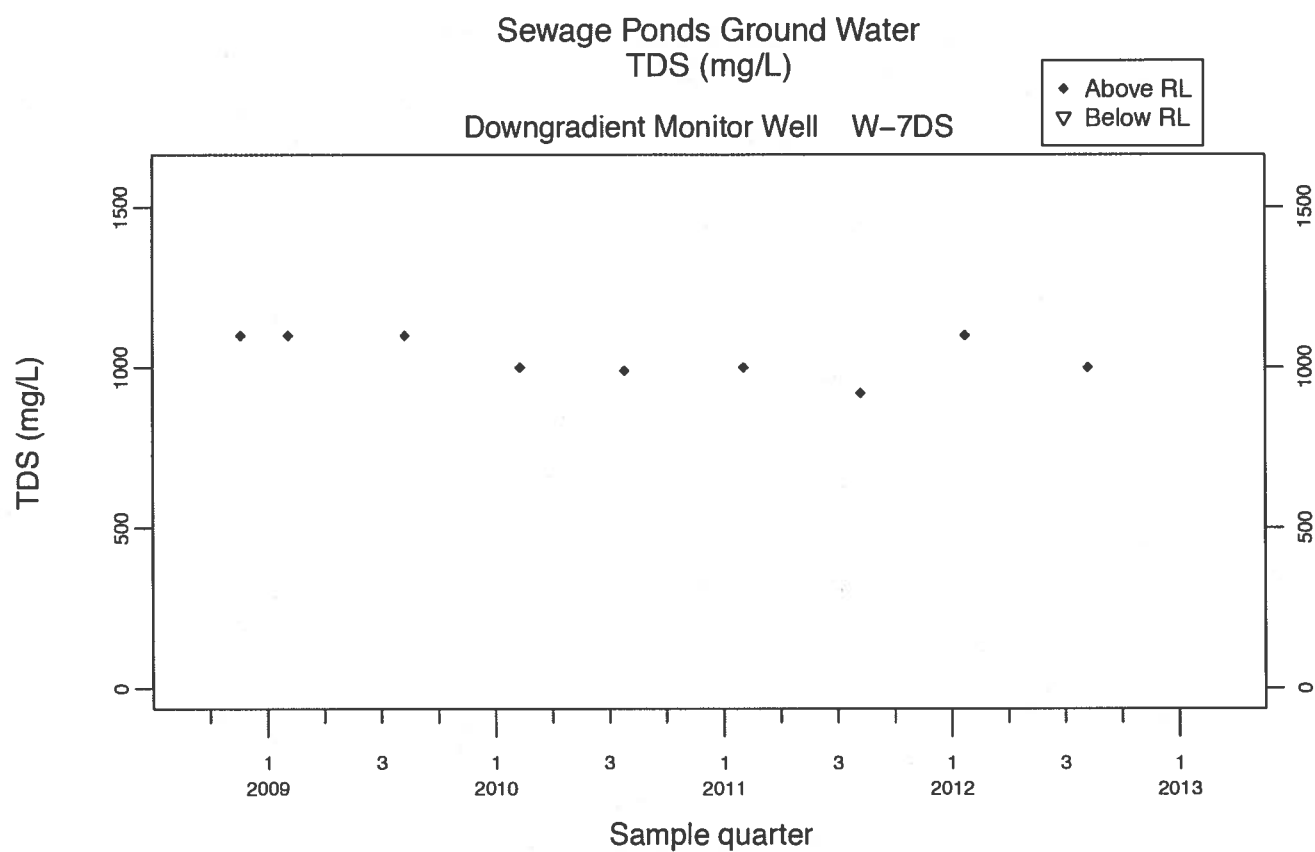


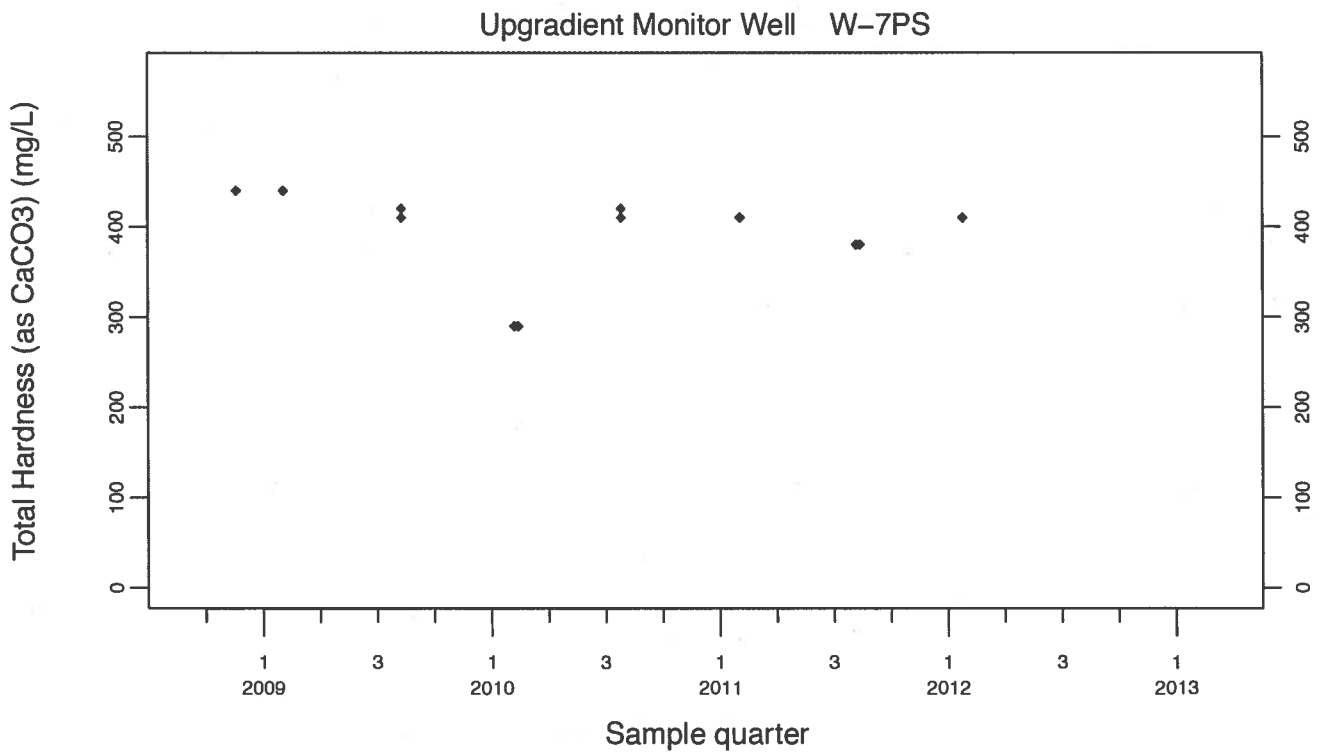
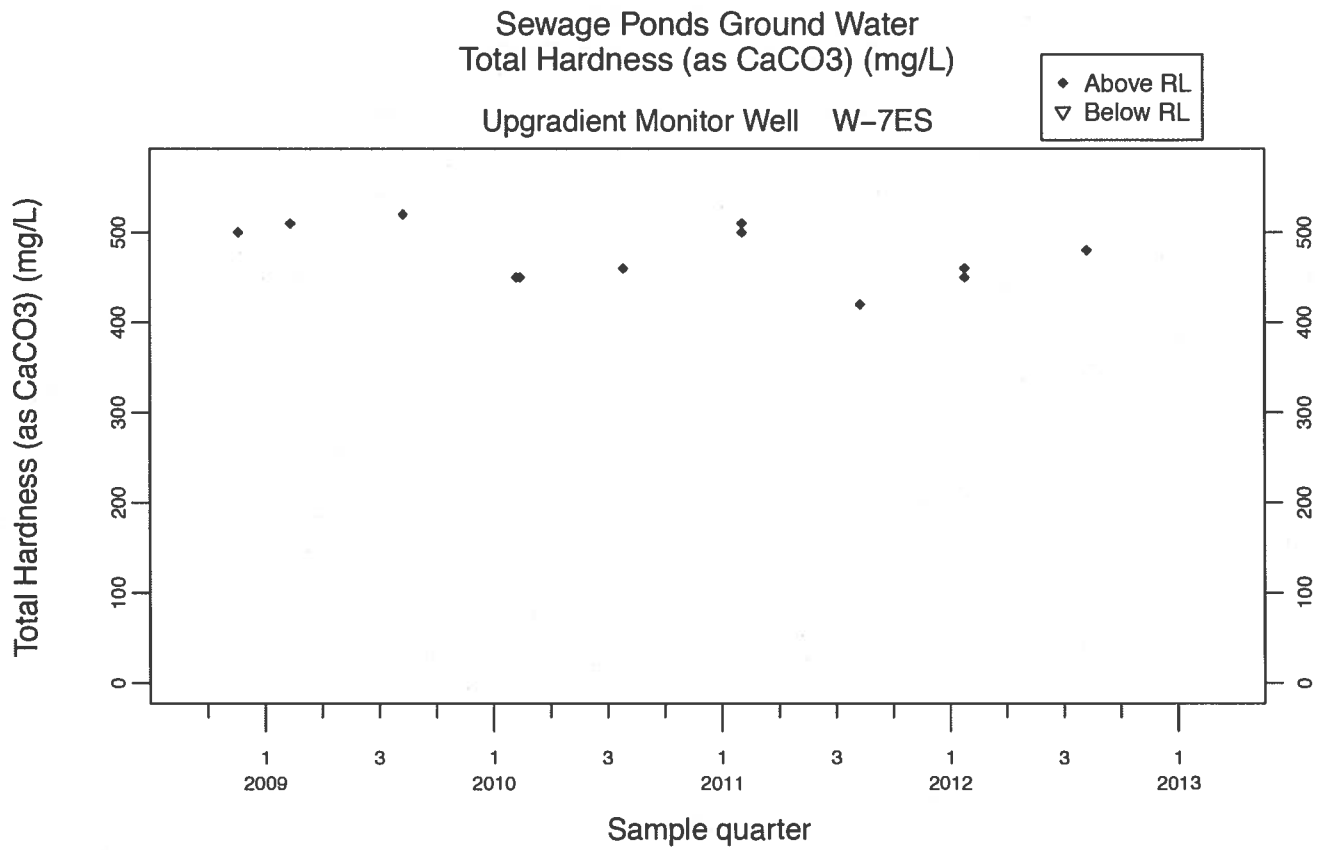


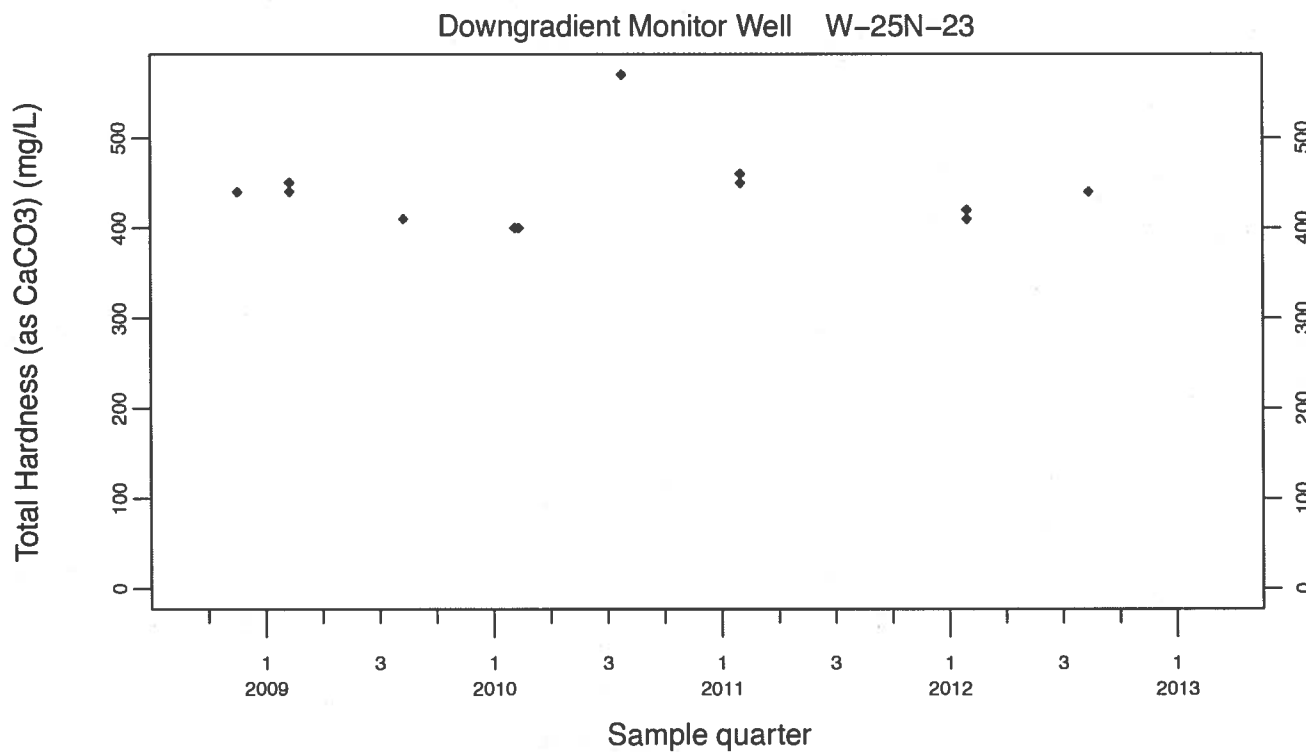
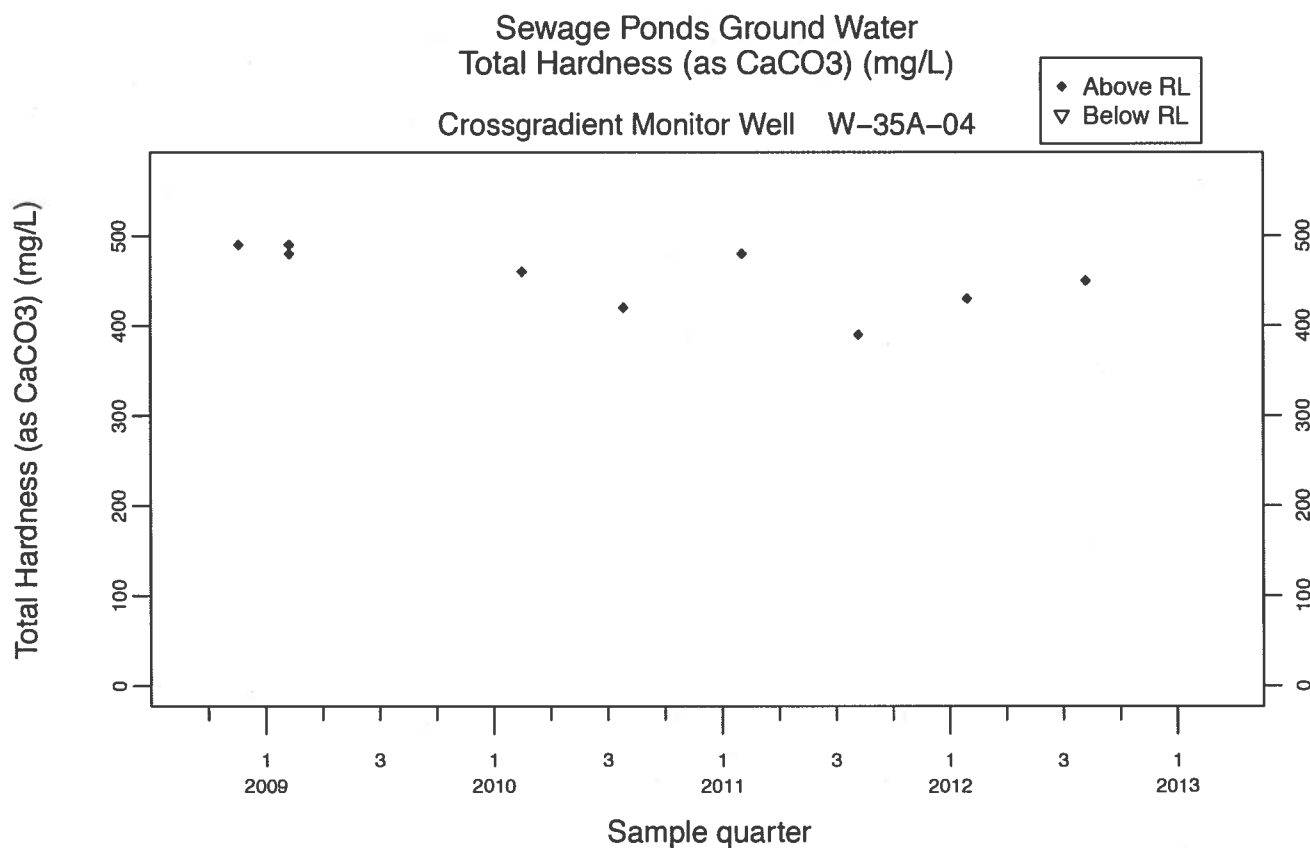


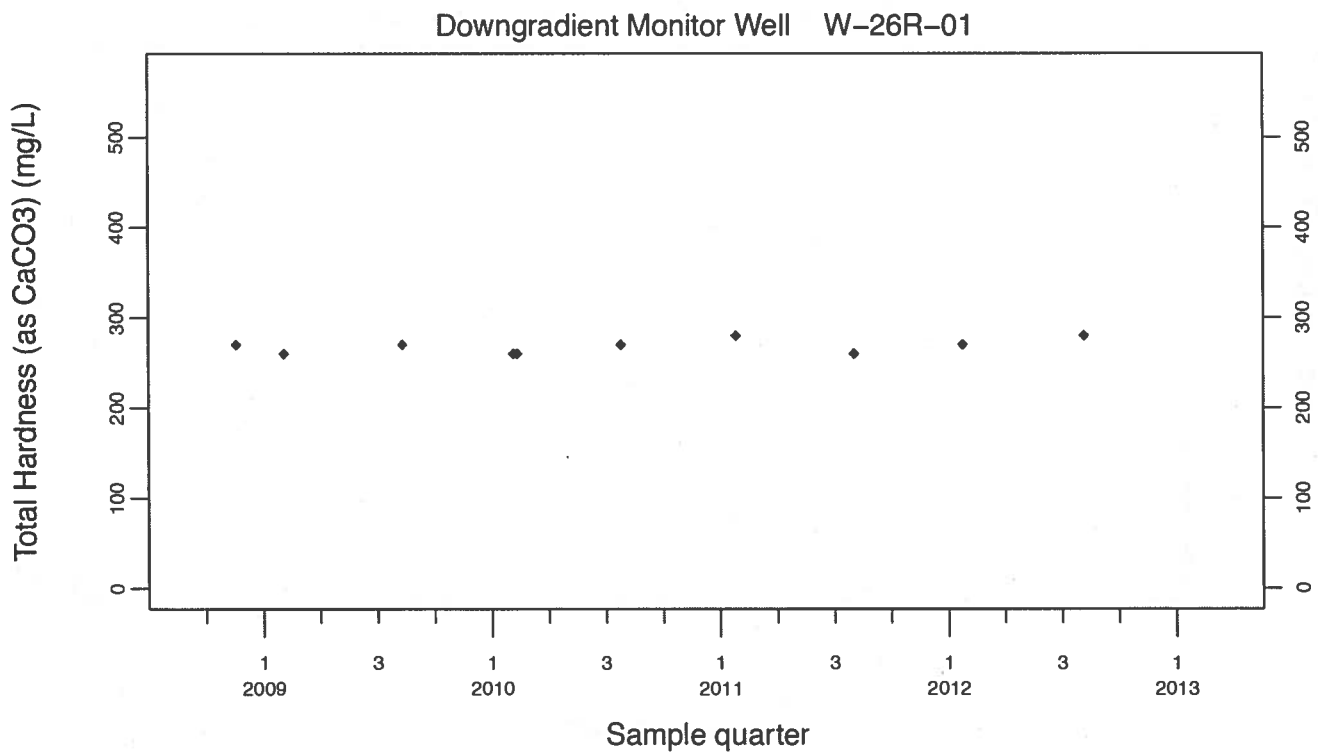
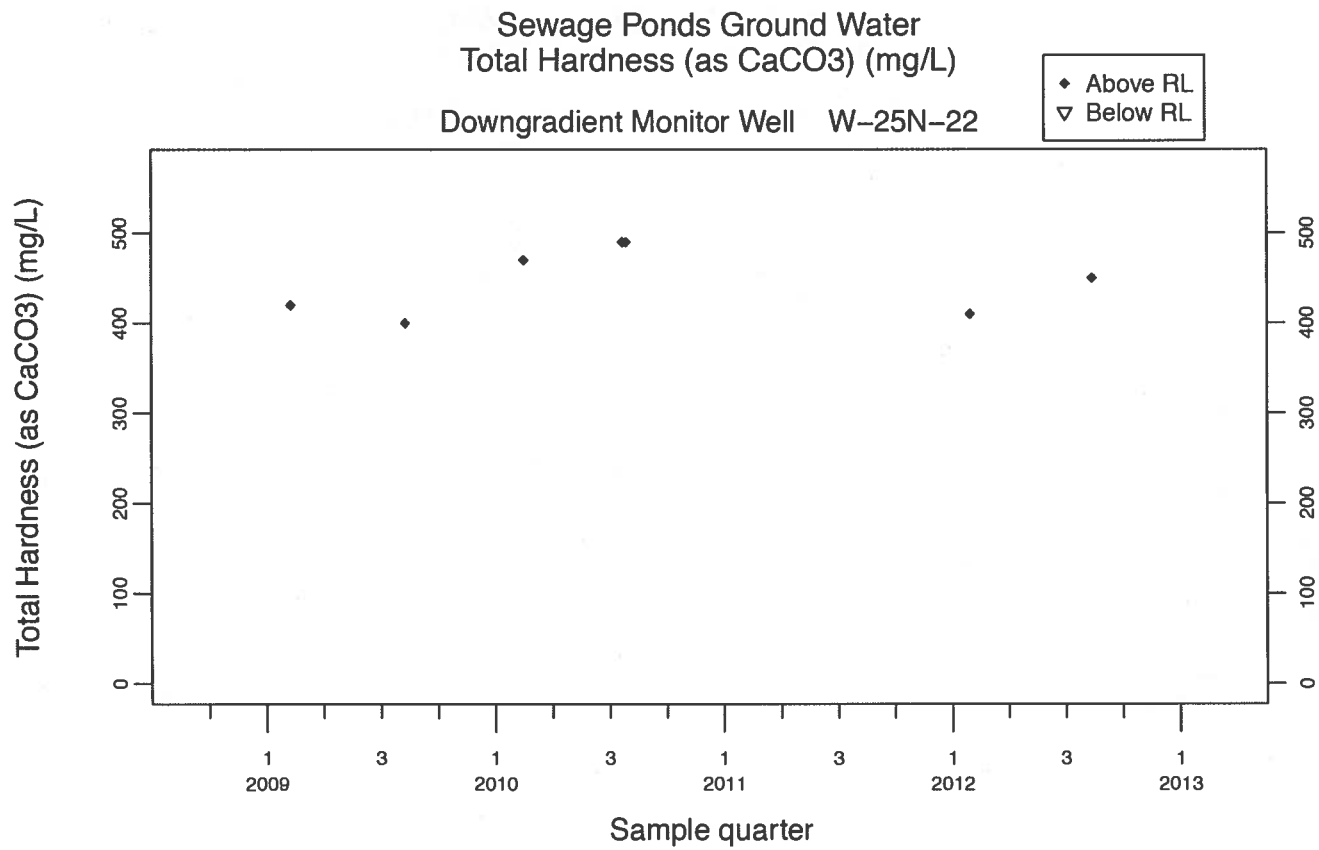


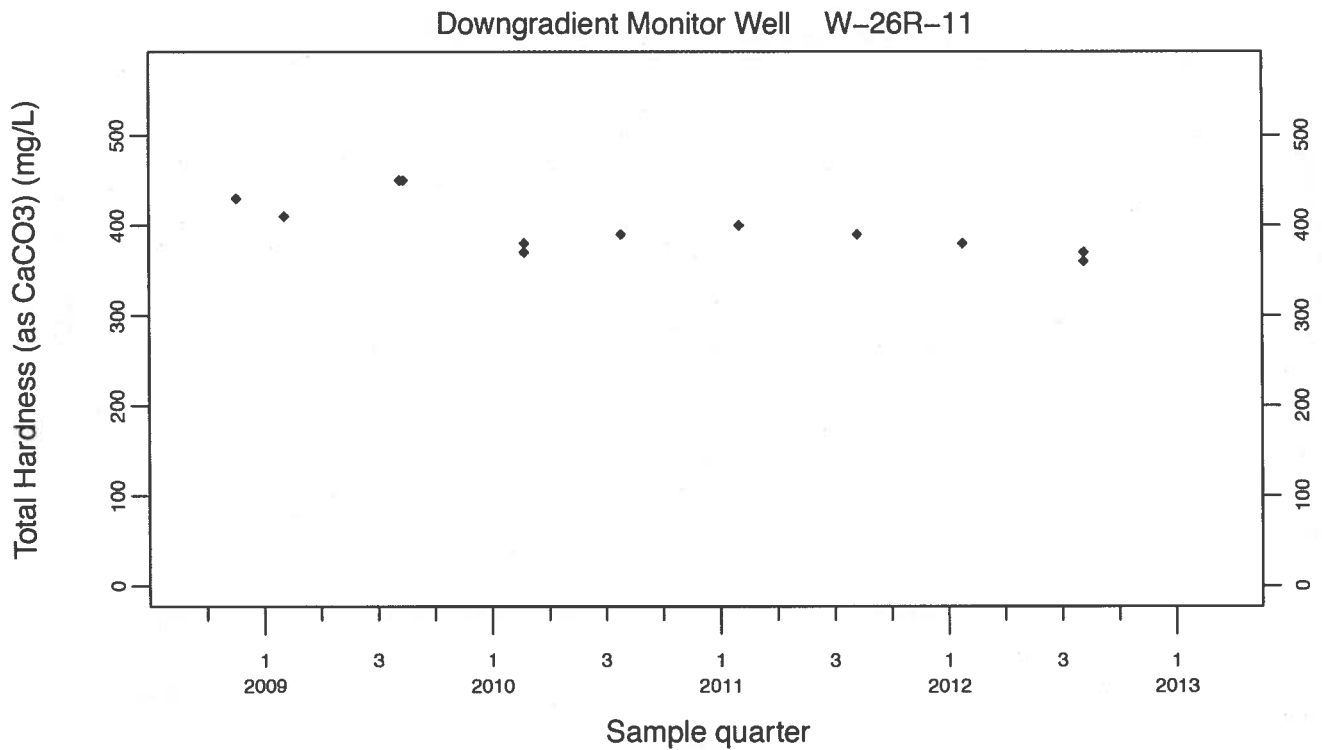
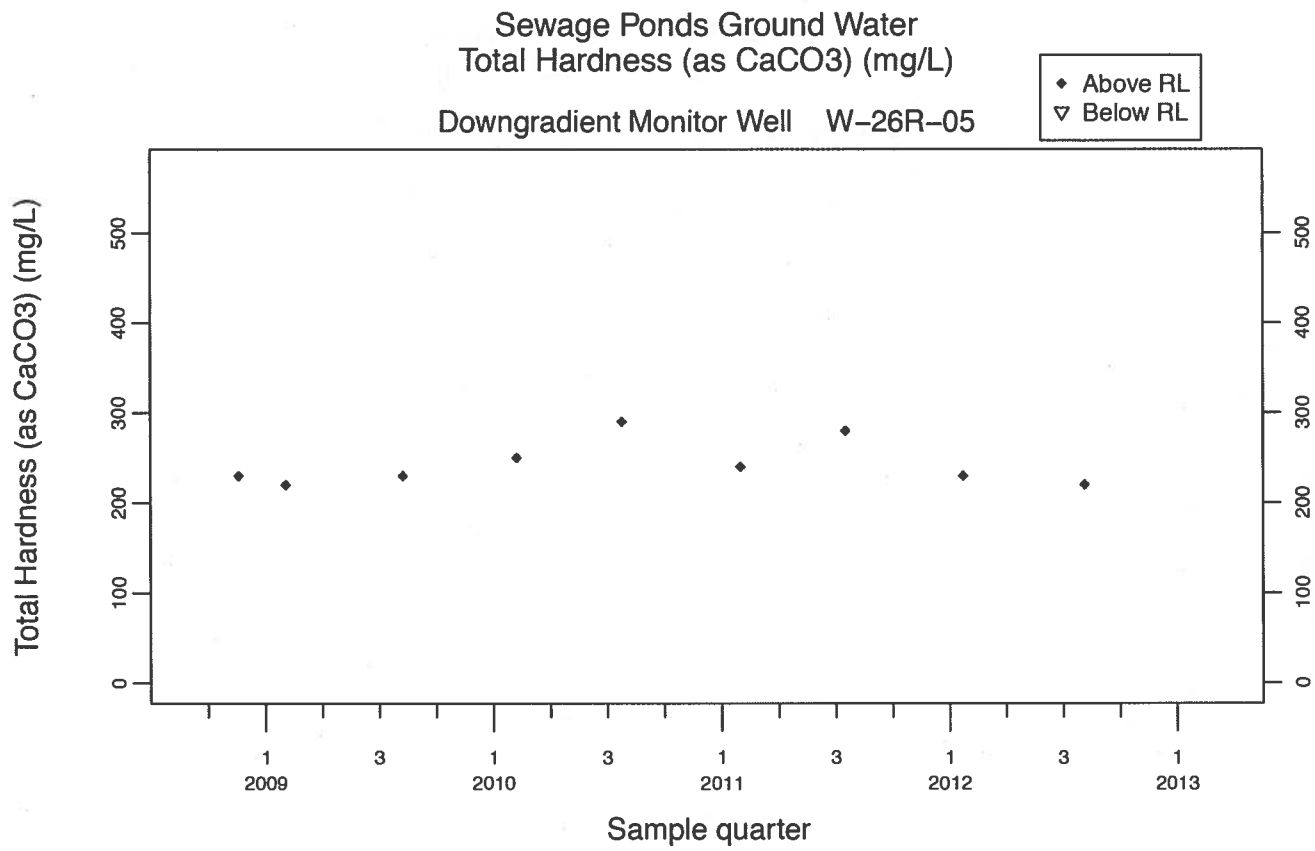


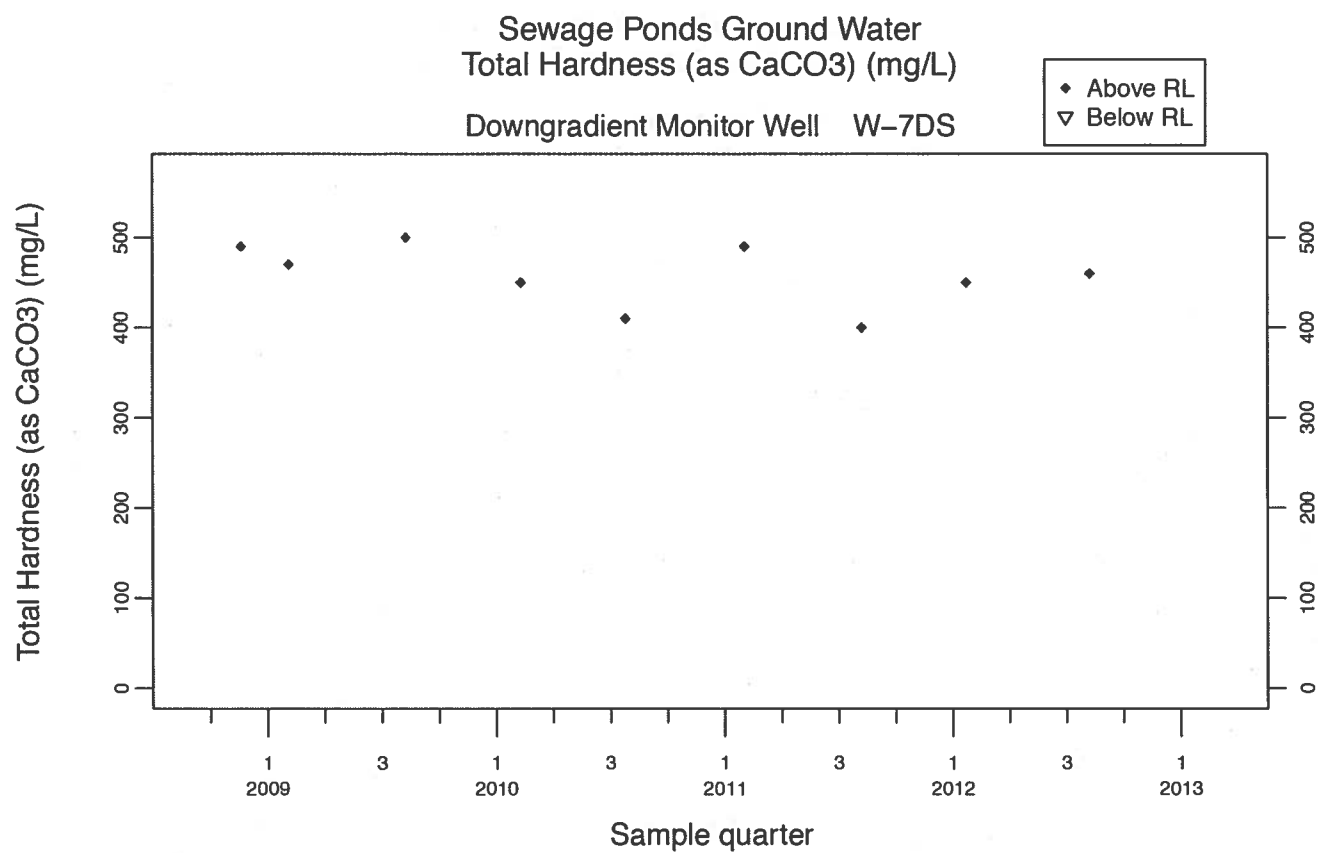


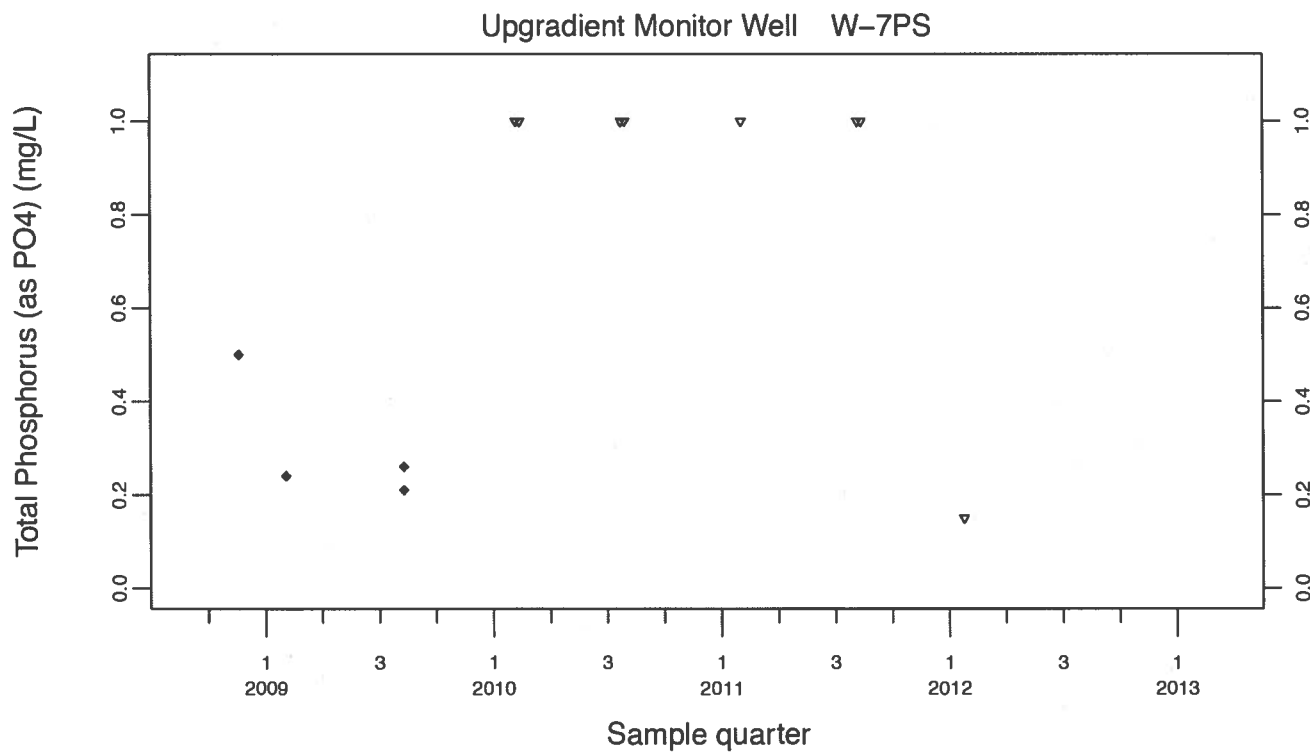
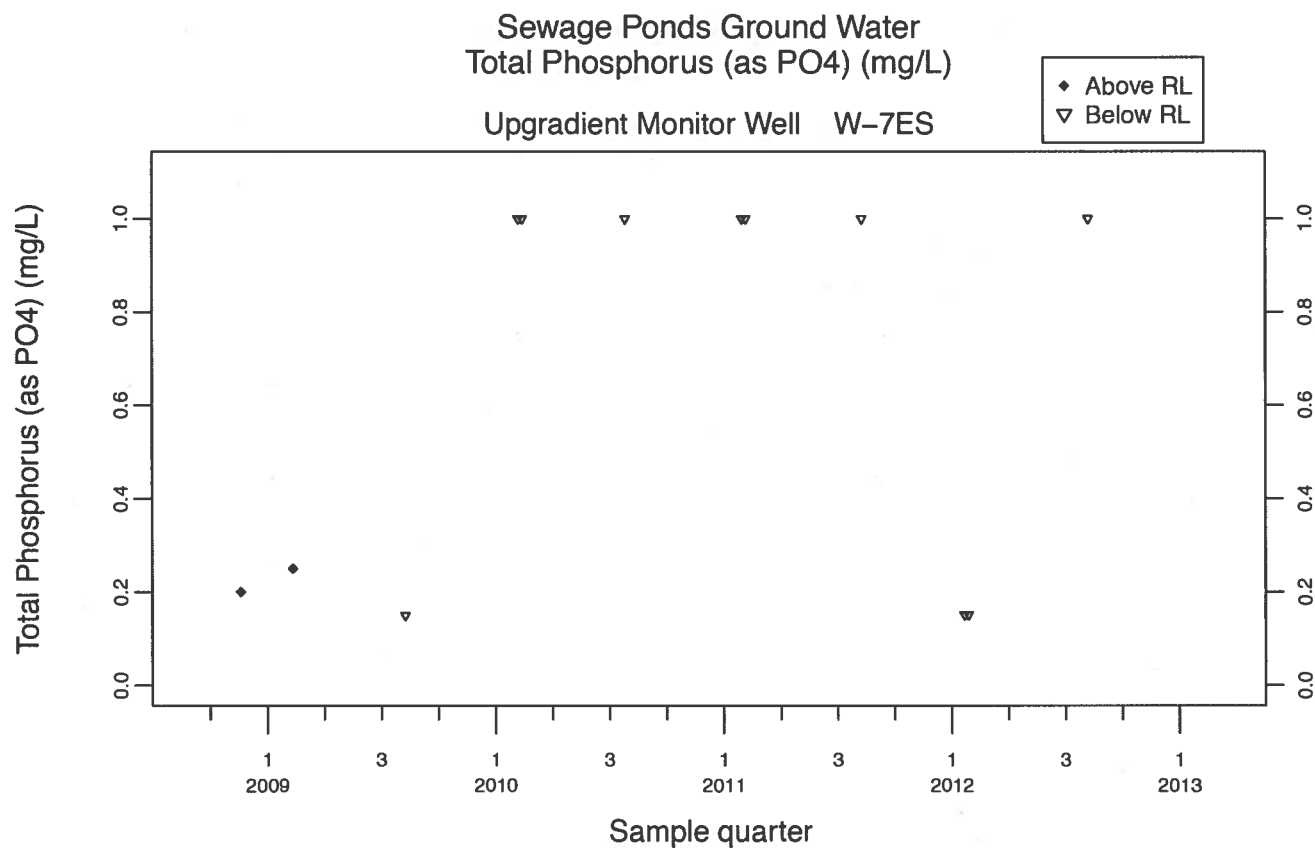


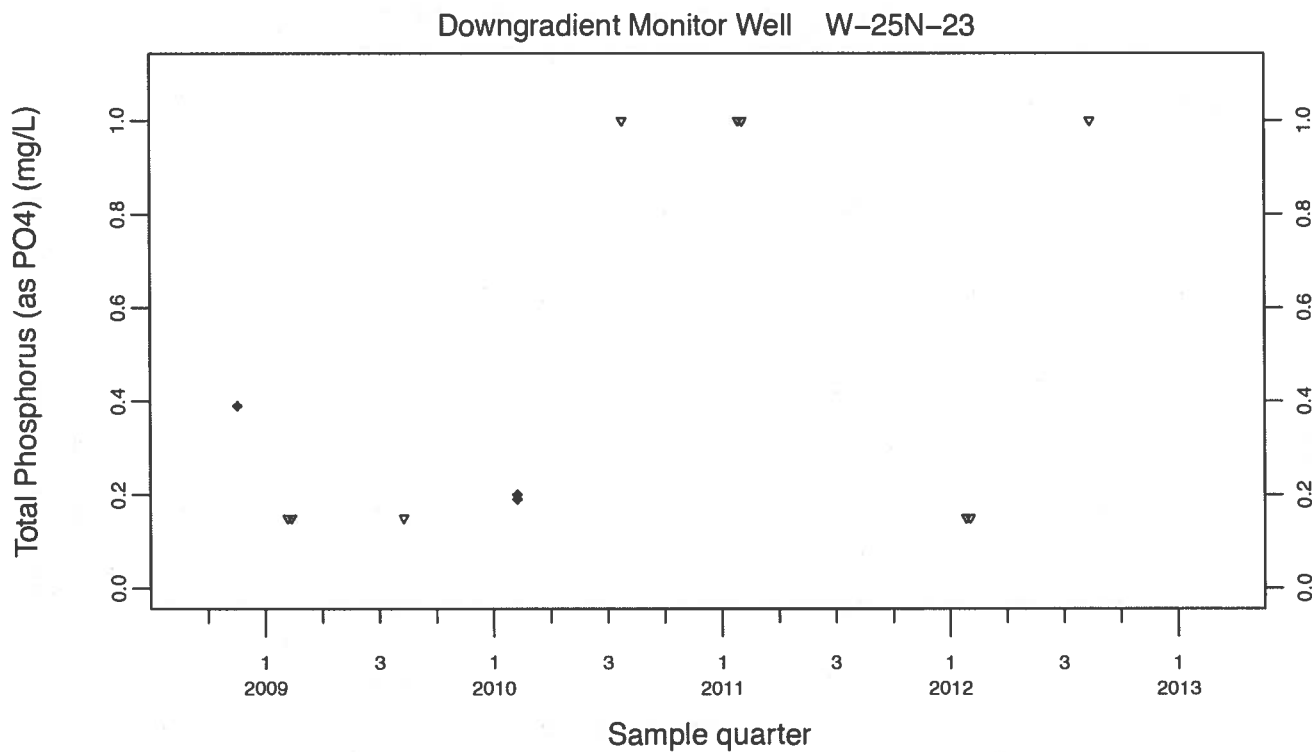
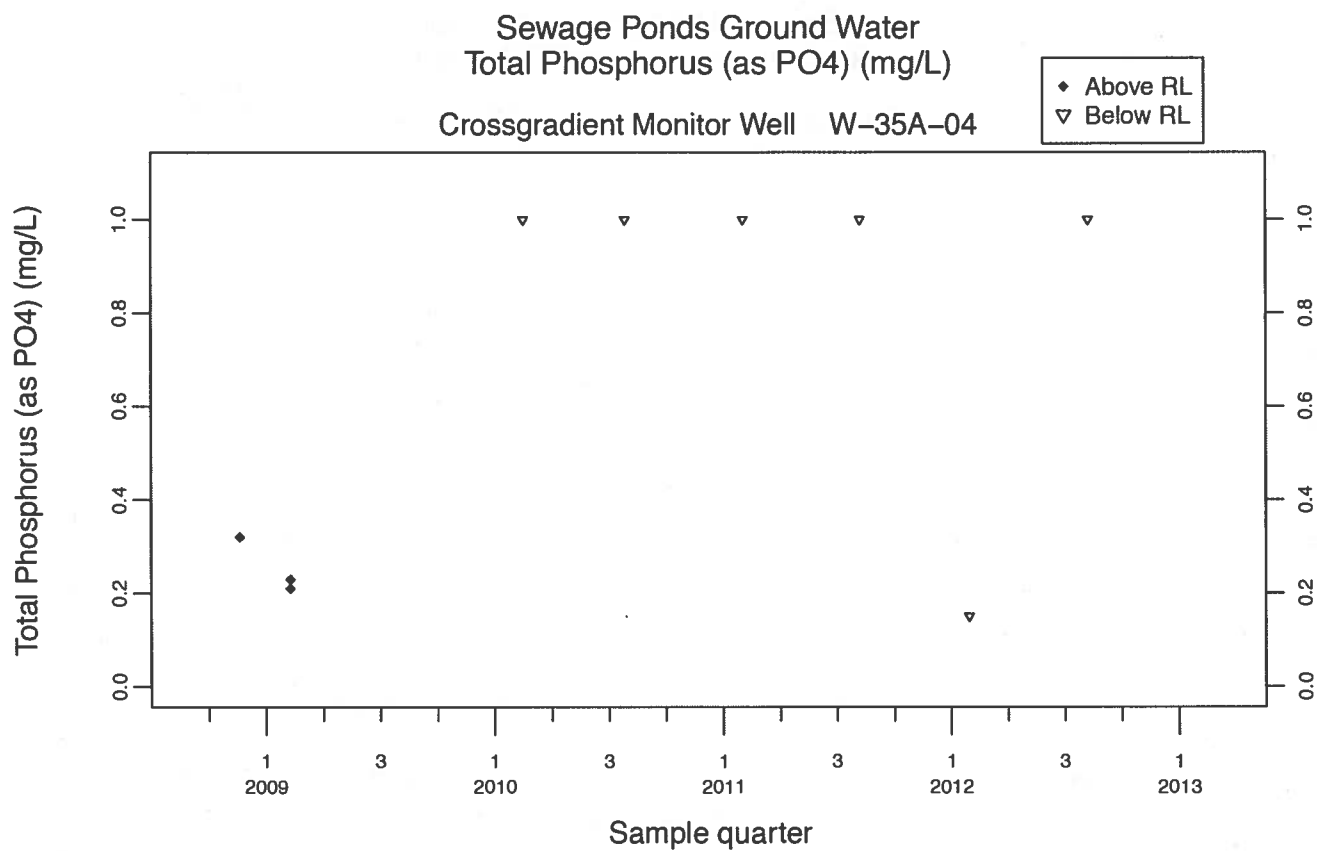




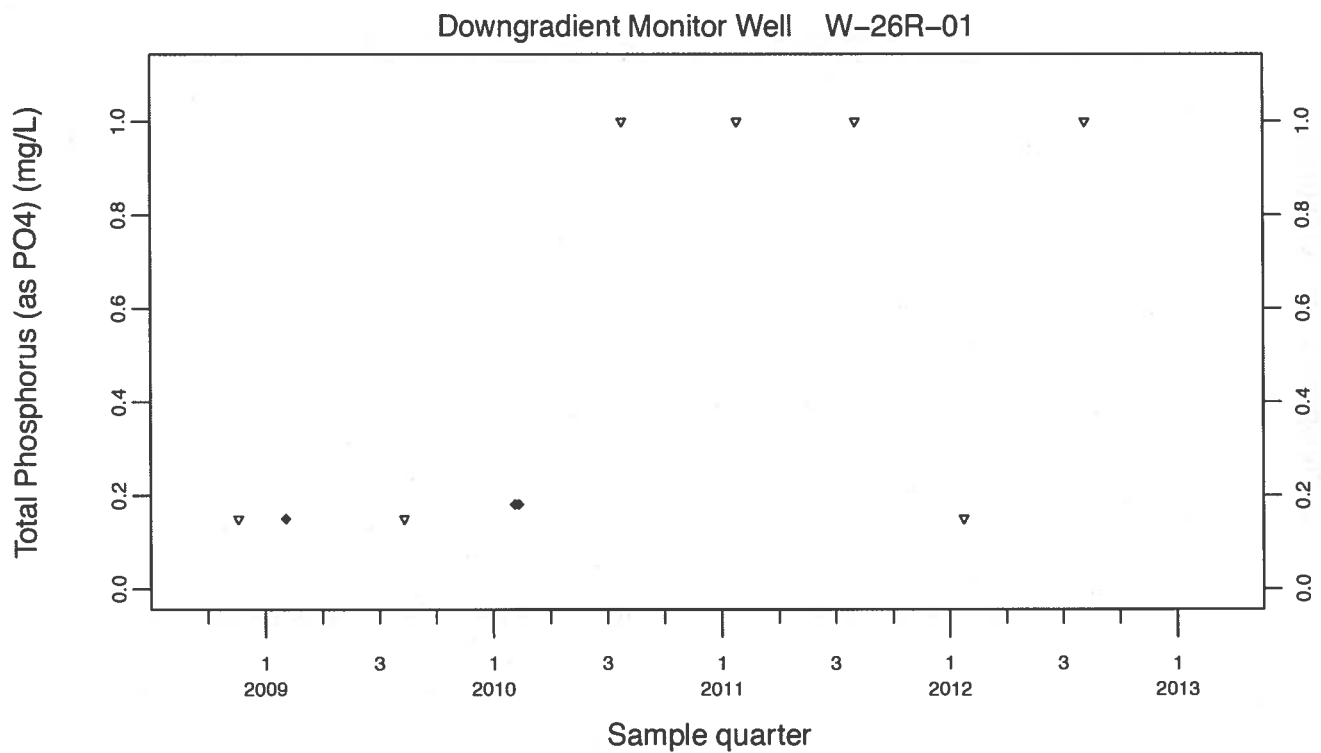
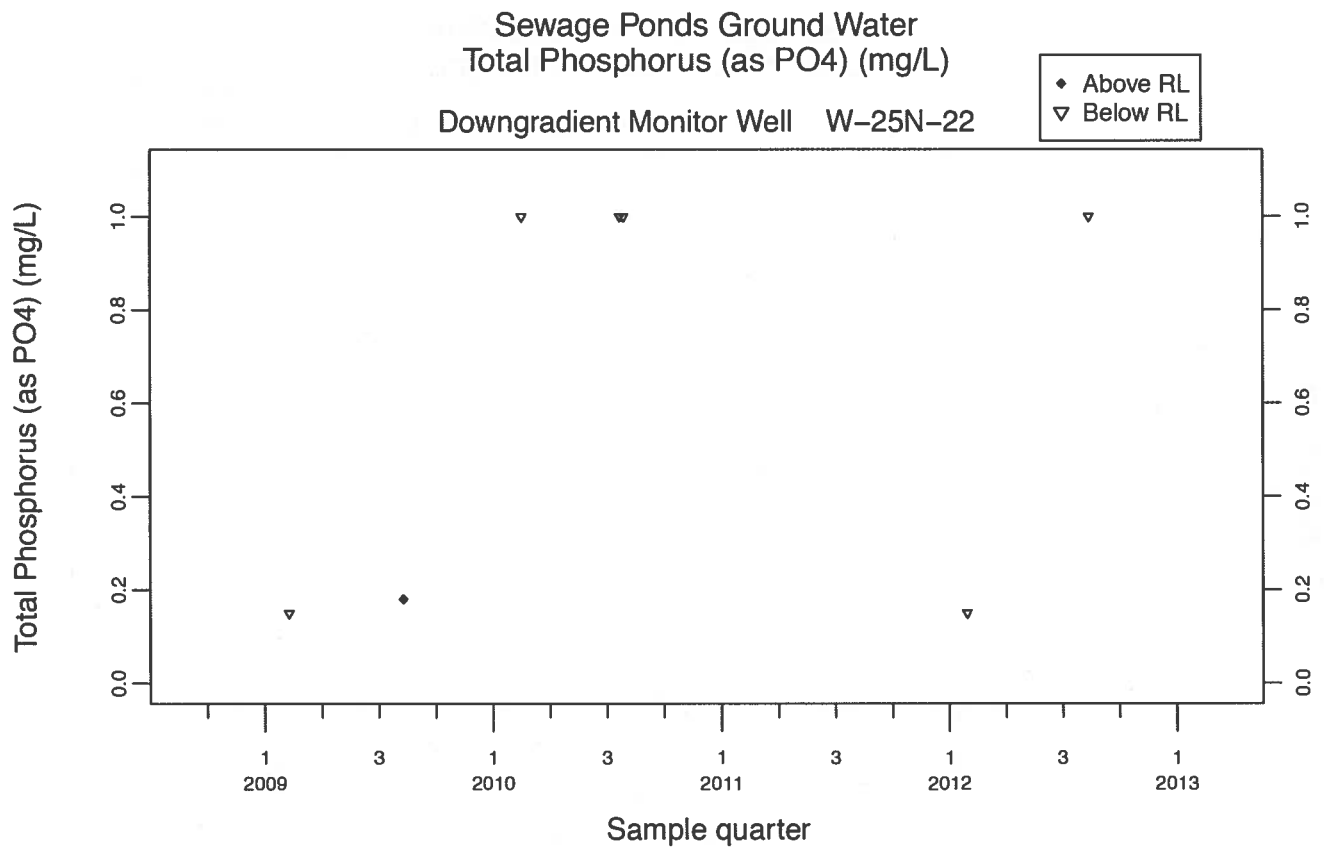


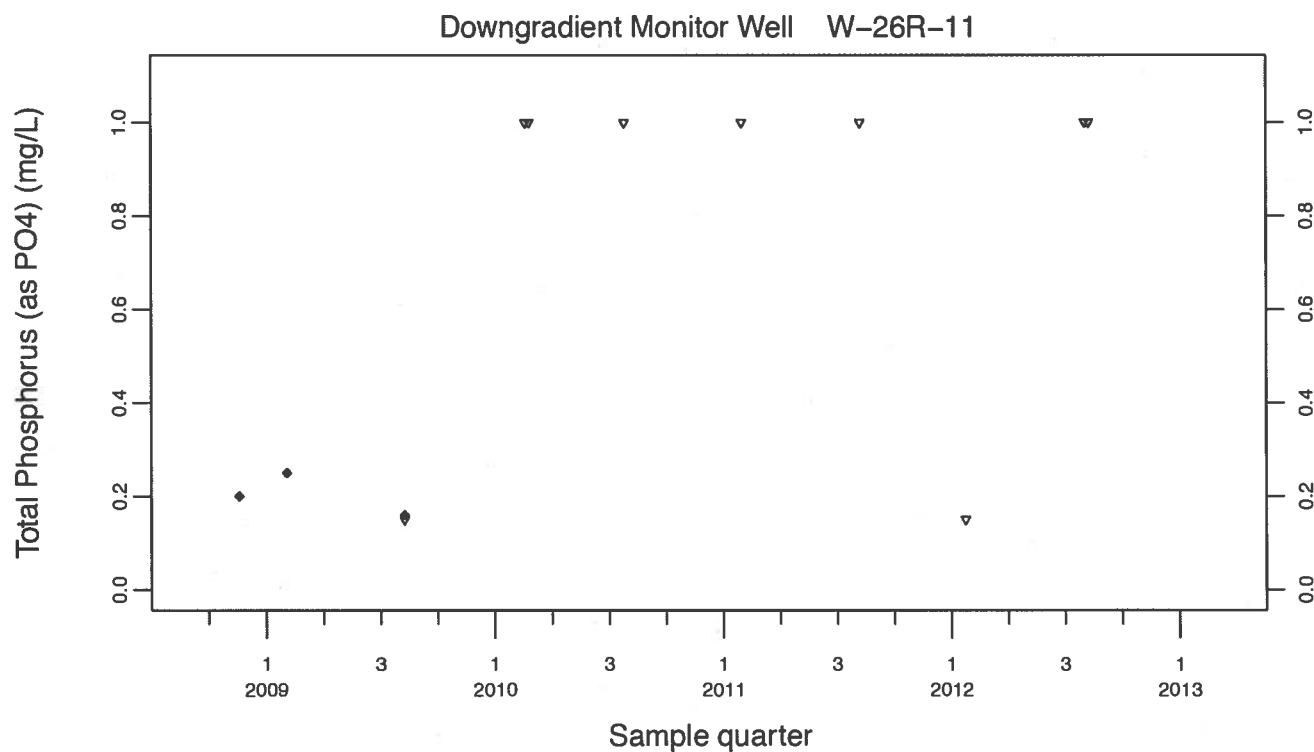
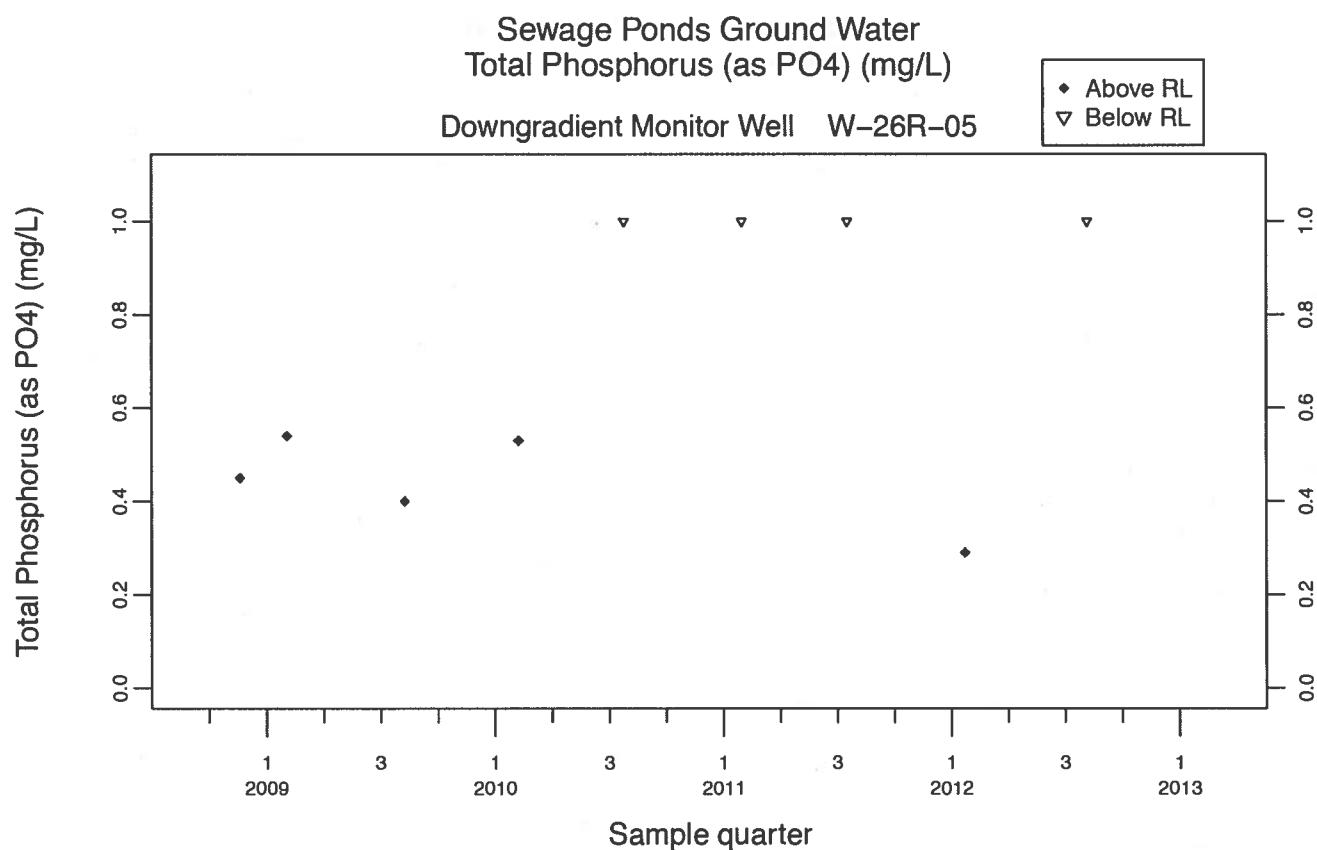


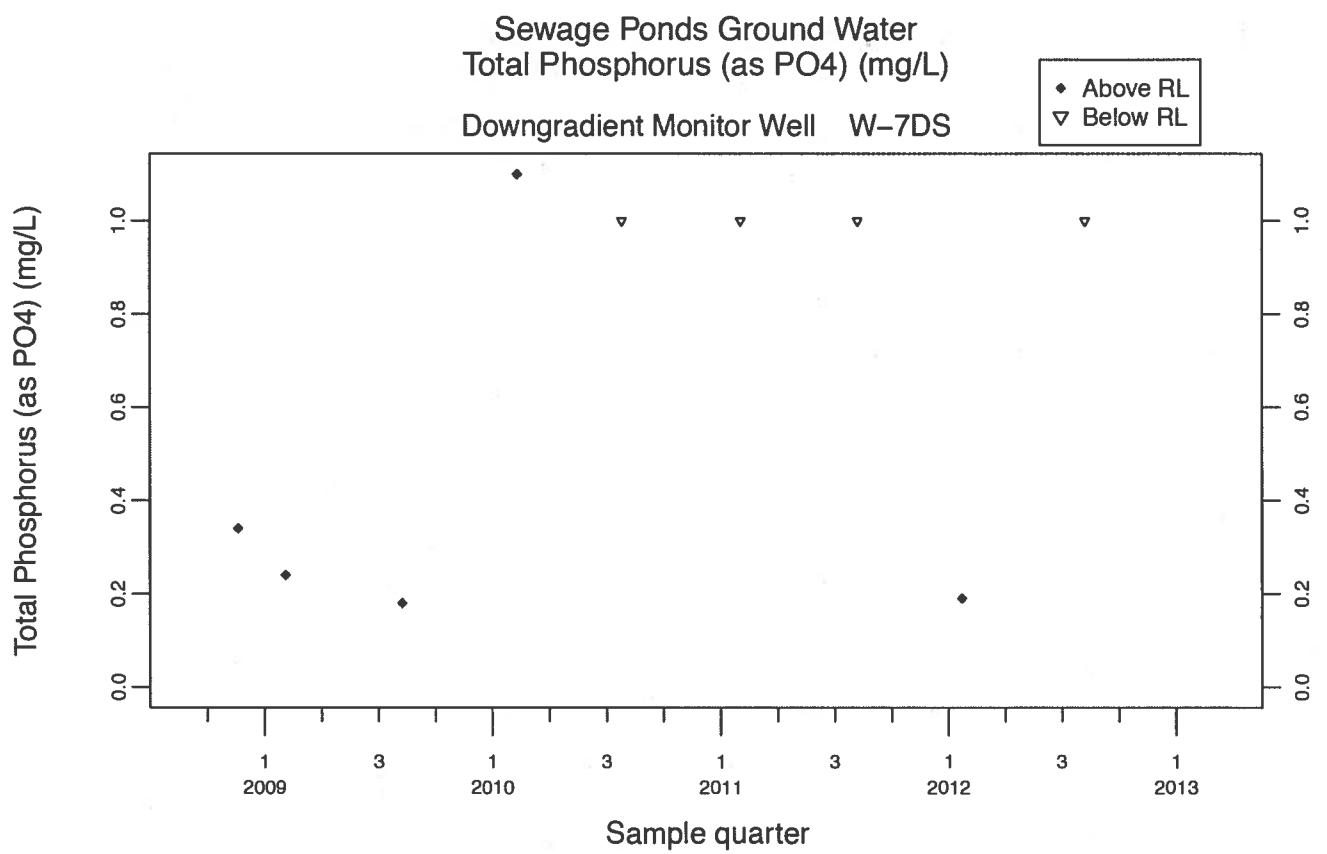












Target Sample Date: 08-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-7ES AREA INFO: S300/GSA/CGSA

DATE: 08-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23120

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: NO3-11

SCREENED INTERVAL: 18.30 - 28.30 PUMP INTAKE DEPTH: 26.30

CASING DEPTH(calc)/(fbgs): 30.10 / 26.8 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fbmp): 18.82 on 15-MAY-12 19.54 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 10.98 10.56 CASING VOL (Gal/Time): 9.07 8.7 x 300 = 26.1

TIME PUMP ON: 1151 INITIAL FLOW RATE (Q=GPM): 2.3 Q

TIME PUMP OFF: 1210 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1154		8.7	1	7.43	22.0	1543	74	1	20.02
1157		17.4	2	7.41	22.1	1585	58	1	20.04
1200		26.1	3	7.38	21.8	1565	60	1	20.04
1202				7.39	21.8	1583	70	1	
1204				7.38	21.8	1590	73	1	

METER SERIAL # CALIBRATED  
 pH : 6205114 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT of REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 27.21 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: CGSAFB QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1210

SAMPLE ID (VERIFY): W-7ES / 3VES TIME COLLECTED: 1210

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

NO 7  
Sample

Added 2.0 oz of CL

Target Sample Date: 09-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-7ES AREA INFO: 8300/GSA/CGSADATE: 09-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23120PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: NO3-11SCREENED INTERVAL: 18.30 - 28.30 PUMP INTAKE DEPTH: 26.30CASING DEPTH(calc)/(fbgs): 30.10 / 26.8 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00DEPTH TO WATER(fbmp): 18.82 on 15-MAY-12 19.69 VOLUME FACTOR: 0.826WATER IN CASING (ft): 10.98 10.41 CASING VOL (Gal/Time): 9.07 8.6 x 300 = 25.8TIME PUMP ON: 1240 INITIAL FLOW RATE (Q=GPM): 23 QTIME PUMP OFF: 1300 MEASURED BY: FLOW METER GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1244	2.3	6.6	1	7.81	22.4	1580	427	1	20.03
1247	2.3	17.2	2	7.80	22.6	1556	379	1	20.03
1250	2.3	25.8	3	7.48	21.9	1570	196	1	20.04
1252				7.44	21.9	1577	123	1	
1254				7.44	21.9	1573	121	1	

METER SERIAL # CALIBRATED  
 pH : 6205114 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT of REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 27.21 / 8300-DRUM  
 TF LOCATION: 8300

QC SAMPLE ID: CGSAFB QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1300SAMPLE ID (VERIFY): W-7ES / 3VES TIME COLLECTED: 1300

PROJECT / ANALYTICAL LAB / REQUESTED ANALYSIS / QUANTITY / TYPE OF CONTAINERS

NO Sample { 3MRP BCLABS-BAK E245.2 1 1 L Polyethylene  
 3MRP BCLABS-BAK S3ANIONS 1 250 ml Polyethylene  
 3MRP BCLABS-BAK S3METALS 1 500ml Polyethylene  
 3MRP BCLABS-BAK S3METALS:FILTER 0 500ml Polyethylene  
 3MRP BCLABS-BAK S3WETCHEM 2 500ml Polyethylene  
 3MRP ALPHAANAL SM9221:SHO 1 250 ml Sterilized Polyethylene

Evacuated all CL

Target Sample Date: 13-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-7ES AREA INFO: S300/GSA/CGSA

DATE: 13-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23156

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: NO3-11

SCREENED INTERVAL: 18.30 - 28.30 PUMP INTAKE DEPTH: 26.30

CASING DEPTH(calc)/(fbgs): 30.10 / 26.8 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fbmp): 18.95 on 22-AUG-12 20.42 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 10.85 9.68 CASING VOL (Gal/Time): 8.96 7.9 X 300 = 2460

TIME PUMP ON: 1111 INITIAL FLOW RATE (Q=GPM): 3.0 Q

TIME PUMP OFF: 1128 MEASURED BY: FLOW METER GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1114		8	1	7.39	22.1	1588	55	1	20.60
1117		16	2	7.43	22.1	1579	64	1	20.65
1119		24	3	7.40	22.3	1577	68	1	20.67
1121				7.40	22.2	1574	65	1	
1123				7.42	22.2	1573	65	1	

METER SERIAL # 6205340 CALIBRATED YES/NO YES SAMPLER/EMPLOYER: silva90

pH: 6205340 YES/NO YES PROJECT: 3EMG 3CMP

SC: YES YES/NO YES SAMPLE PRESERVATION/AMT of REAGENT: NA

mV: YES YES/NO YES PURGE VOL/EXCESS H2O DEST: 26.89 / S300-DRUM

H2O: YES YES/NO YES TF LOCATION: S300

QC SAMPLE ID: W-75Y QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1128

SAMPLE ID (VERIFY): W-7ES / 3VES TIME COLLECTED: 1128

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3CMP		BCLABS-BAK		E601		3		40 mL Glass VOA vial
<del>NO SPC</del> <del>3EMG</del>		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Added 2.0 oz of CL

Target Sample Date: 14-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-7ES AREA INFO: S300/GSA/CGSA

DATE: 14-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA231567

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: NO3-11

SCREENED INTERVAL: 18.30 - 28.30 PUMP INTAKE DEPTH: 26.30

CASING DEPTH(calc)/(fbgs): 30.10 / 26.8 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fbmp): 18.95 on 22-AUG-12 20.42 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 10.85 9.68 CASING VOL (Gal/Time): 8.96 7.9 x 300 = 2460

TIME PUMP ON: 1204 INITIAL FLOW RATE (Q=GPM): 3.0

TIME PUMP OFF: 1218 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1207	30	2.9	1	7.38	22.7	1581	371	1	20.61
1209	30	15.8	2	7.38	22.5	1579	325	1	20.65
1212	30	23.7	3	7.40	22.4	1568	254	1	20.68
1214				7.40	22.4	1569	175	1	
1216				7.40	22.4	1572	168	1	

METER SERIAL # 6205340 CALIBRATED YES/NO  
 pH : YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO  
 SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG 3CMP  
 SAMPLE PRESERVATION/AMT of REAGENT: N/A  
 PURGE VOL/EXCESS H2O DEST: 26.89 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: W-75Y QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1315

SAMPLE ID (VERIFY): W-7ES/3VES TIME COLLECTED: 1218

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
NO sample { 3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3CMP		BCLABS-BAK		E601		3		40 mL Glass VOA vial
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Evacuated all CL from well

Month:            Norm Qtr: 3            Norm Year: 2012

WELL ID: W-7PS AREA INFO: S300/GSA/CGSA

DATE: 08-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23120

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: TCE-3/NO3-17

SCREENED INTERVAL: 19.48 - 22.48 INTAKE DEPTH: 0.00

CASING DEPTH(calc)/(fbgs): 22.48 / 19.5 CASING DIAMETER/TCASING HT(in): 4.5 / 2.68

DEPTH TO WATER(fbmp): 0.00 on 15-MAY-12 18.4 Tag Pump VOLUME FACTOR: 0.826

WATER IN CASING (ft): 22.18 CASING VOL (Gal/Time): 18.33

TIME PUMP ON: \_\_\_\_\_ INITIAL FLOW RATE (Q=GPM): \_\_\_\_\_

TIME PUMP OFF: \_\_\_\_\_ MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
				DRI					

METER SERIAL # CALIBRATED SAMPLER/EMPLOYER: silva90  
pH : 6705114 YES/NO PROJECT: 3MRP  
SC : YES/NO SAMPLE PRESERVATION/AMT of REAGENT: N/A  
mV : YES/NO PURGE VOL/EXCESS H2O DEST: 54.98 / 8300-DRUM  
H2O: YES/NO TF LOCATION: 8300

QC SAMPLE ID:W-75Y      QC LAB(S): BCLABS-BAK, ALPHAANAL      QC SAMPLE TIME:

SAMPLE ID (VERIFY): 41. 7PS / 3UES TIME COLLECTED: \_\_\_\_\_

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

Well was dry no samples. WL probe was  
hitting top of pump.

NOTE:

Purge rate/time: N/A since est\_sus\_flow = 0  
Purge Volume: 23.7900009 gal.  
Revision: 07/08/2011



Target Sample Date: 12-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-7PS AREA INFO: S300/GSA/CGSA

DATE: 12-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23155

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: TCE-3/N03-17

SCREENED INTERVAL: 19.48 - 22.48 INTAKE DEPTH: 0.00

CASING DEPTH(calc)/(fbgs): 22.48 / 19.5 CASING DIAMETER/TCASING HT(in): 4.5 / 2.68

DEPTH TO WATER(fbmp): 0.00 on 22-AUG-12 *Day* VOLUME FACTOR: 0.826

WATER IN CASING (ft): 22.18 CASING VOL (Gal/Time): 18.33

TIME PUMP ON: INITIAL FLOW RATE (Q=GPM):

TIME PUMP OFF: MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW

METER SERIAL # CALIBRATED SAMPLER/EMPLOYER: silva90

pH : YES/NO PROJECT: 3EMG 3CMP

SC : YES/NO SAMPLE PRESERVATION/AMT of REAGENT:

mV : YES/NO PURGE VOL/EXCESS H2O DEST: 54.98 / S300-DRUM

H2O: YES/NO TF LOCATION: S300

QC SAMPLE ID: CGSAFB QC LAB: BCLABS-BAK, ALPHAANAL, CURTISTOMP SAMPLE TIME:

SAMPLE ID (VERIFY): TIME COLLECTED:

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:N03		1		250 ml Polyethylene
3CMP		CURTISTOMP		E601		3		40 mL Glass VOA vial
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

*Day, No Samples*

## NOTE:

Purge rate/time: N/A since est\_sus\_flow = 0

Purge Volume: 23.790009 gal.

Revision: 07/08/2011

Target Sample Date: 12-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-35A-04 AREA INFO: S300/GSA/CGSA

DATE: 12-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23155

PURGE METHOD/SAMPLE METHOD: Grunfos / 3VES CONTAMINANT PRESENT: ND

SCREENED INTERVAL: 19.30 - 29.30 PUMP INTAKE DEPTH: 26.28

CASING DEPTH(calc)/(fbgs): 28.57 / 29 CASING DIAMETER/TCASING HT(in): 4.5 / 0.00

DEPTH TO WATER(fbmp): 14.94 on 23-AUG-12 15.48 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 14.06 13.09 CASING VOL (Gal/Time): 11.62  $10.8 \times 3.0 = 32.4$ 

TIME PUMP ON: 1014 INITIAL FLOW RATE (Q=GPM): 3.0

TIME PUMP OFF: 1037 MEASURED BY: FLOW METER, GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1017		10.8	1	7.48	22.8	1562	177	1	15.55
1020		21.6	2	7.44	22.5	1567	177	1	15.57
1024 <del>1020</del>		32.4	3	7.44	22.5	1562	173	1	15.58
1026				7.41	22.4	1560	170	1	
1028				7.41	22.4	1555	171	1	

METER SERIAL # CALIBRATED  
 pH : 620544 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O : YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG 3CMP  
 SAMPLE PRESERVATION/AMT of REAGENT: N/A  
 PURGE VOL/EXCESS H2O DEST: 34.85 / None  
 TF LOCATION: Ground

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-35A-04/3045 TIME COLLECTED: 1037

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		GEL		AS:FILTER		0		1L Polyethylene
3EMG		GEL		AS:UISO		2		1L Polyethylene
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E200.7:FILTER		0		1L Polyethylene
3EMG		BCLABS-BAK		E200.7:K		1		1L Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:PERC		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E502.2		6		40 mL Glass VOA vial
3CMP		CURTISTOMP		E601		3		40 mL Glass VOA vial
3EMG		BCLABS-BAK		E8330:R+H		3		1L Amber Glass
3EMG		GEL		E900		1		1L Polyethylene
3EMG		GEL		E900:FILTER		0		1L Polyethylene
3EMG		GEL		E906		1		250 ml GLASS-AMBER
3EMG		ALPHANAL		SN9221		1		250 ml Sterilized Polyethylene
3EMG		BCLABS-BAK		WGMGMET3		1		1L Polyethylene
3EMG		BCLABS-BAK		WGMGMET3:FILTER		0		1L Polyethylene

No Sample

Added 02 of CC to Well

Target Sample Date: 13-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-35A-04 AREA INFO: S300/GSA/CGSA

DATE: 13-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23155-6

PURGE METHOD/SAMPLE METHOD: Grunfos / 3VES CONTAMINANT PRESENT: ND

SCREENED INTERVAL: 19.30 - 29.30 PUMP INTAKE DEPTH: 26.28

CASING DEPTH(calc)/(fbgs): 28.57 / 29 CASING DIAMETER/TCASING HT(in): 4.5 / 0.00

DEPTH TO WATER(fbmp): 14.94 on 23-AUG-12 15.44 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 14.06 13.13 CASING VOL (Gal/Time): 11.62  $10.8 \times 30 = 32.4$ 

TIME PUMP ON: 1140 INITIAL FLOW RATE (Q=GPM): 3.0 c2

TIME PUMP OFF: 1159 MEASURED BY: FLOW METER GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1144	3.0	10.8	1	7.48	22.5	1573	387	1	15.56
1147	3.0	21.6	2	7.48	22.7	1571	209	1	15.60
1151		32.4	3	7.46	22.8	1566	205	1	15.60
1153				7.46	22.7	1560	200	1	
1155				7.46	22.7	1558	174	1	

METER SERIAL # CALIBRATED SAMPLER/EMPLOYER: silva90  
 pH: 6205340 YES/NO PROJECT: JEMG 3CMP  
 SC: YES/NO SAMPLE PRESERVATION/AMT of REAGENT: NA  
 mV: YES/NO PURGE VOL/EXCESS H2O DEST: 34.85 / None  
 H2O: YES/NO TF LOCATION: Ground

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-35A-04/3VES TIME COLLECTED: 1159

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		GEL		AS:FILTER		0		1L Polyethylene
3EMG		GEL		AS:UIO		2		1L Polyethylene
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E200.7:FILTER		0		1L Polyethylene
3EMG		BCLABS-BAK		E200.7:K		1		1L Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:PERC		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E502.2		6		40 mL Glass VOA vial
3CMP		CURTISTOMP		E601		3		40 mL Glass VOA vial
3EMG		BCLABS-BAK		E8330:R+H		3		1L Amber Glass
3EMG		GEL		E900		1		1L Polyethylene
3EMG		GEL		E900:FILTER		0		1L Polyethylene
3EMG		GEL		E906		1		250 ml GLASS-AMBER
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene
3EMG		BCLABS-BAK		WGMGMET3		1		1L Polyethylene
3EMG		BCLABS-BAK		WGMGMET3:FILTER		0		1L Polyethylene

NO  
Samples

NO Samples

Evacuated all CL (20 oz of CL added on 11/12/12)

Target Sample Date: 09-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-35A-04 AREA INFO: S300/GSA/CGSADATE: 09-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA231261PURGE METHOD/SAMPLE METHOD: Grunfos / 3VES CONTAMINANT PRESENT: NDSCREENED INTERVAL: 19.30 - 29.30 PUMP INTAKE DEPTH: 26.28CASING DEPTH(calc)/(fbgs): 28.57 / 29 CASING DIAMETER/TCASING HT(in): 4.5 / 0.00DEPTH TO WATER(fbmp): 14.40 on 14-JUN-12 14.81 VOLUME FACTOR: 0.826WATER IN CASING (ft): 14.60 13.76 CASING VOL (Gal/Time): 12.06 11.3 13.0 = 33.96TIME PUMP ON: 1015 INITIAL FLOW RATE (Q=GPM): 3.0TIME PUMP OFF: 1033 MEASURED BY: FLOW METER GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1019	30	11.3	1	7.72	22.2	1549	266	1	14.92
1023	30	22.6	2	7.51	22.0	1553	141	1	14.96
1027	30	33.9	3	7.54	21.9	1554	126	1	14.98
1029				7.50	21.9	1557	128	1	
1031				7.48	21.8	1557	130	1	

METER SERIAL # 6205114 CALIBRATED  
 pH : YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT of REAGENT: NTA  
 PURGE VOL/EXCESS H2O DEST: 36.19 / None  
 TF LOCATION: Ground

QC SAMPLE ID: W-35A-04 QC LAB(S): 3VES QC SAMPLE TIME: 1033SAMPLE ID (VERIFY): W-35A-04 / 3VES TIME COLLECTED: 1033

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

Evacuated all CL

Target Sample Date: 14-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-25N-23 AREA INFO: S300/GSA/EGSA

DATE: 14-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA231273

PURGE METHOD/SAMPLE METHOD: GP / LIVES 345 CONTAMINANT PRESENT: \*TCE-6.0

SCREENED INTERVAL: 21.80 - 36.80 PUMP INTAKE DEPTH: 35.70

CASING DEPTH(calc)/(fbgs): 37.15 / 35.3 DISCHARGE LINE/TCASING HT(in): 1 / 2.50 4.5

DEPTH TO WATER(fbmp): 22.58 on 15-MAY-12 23.38 VOLUME FACTOR: 0.041 1.83 9.5 11.5 x 3.5 =

WATER IN CASING (ft): 15.22 13.77 CASING VOL (Gal/Time): 0.62 1.5 x 3.5 = 5.25 34.5 Gal

TIME PUMP ON: 1245 INITIAL FLOW RATE (Q=GPM): 2.8 Q

TIME PUMP OFF: 1310 MEASURED BY: FLOW METER GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1250	1.5	11.5	1	7.84	22.5	1524	337	1	25.82
1255	1.5	23	2	7.34	22.3	1518	273	1	26.74
1300	1.5	34.5	3	7.36	22.3	1519	189	1	27.27
1305				7.27	22.2	1519	173	1	
1307				7.25	22.3	1509	168	1	

METER SERIAL # 6205114 CALIBRATED  
 pH : YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O : YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT OF REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 1.45 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-25N-23 / 345 TIME COLLECTED: 1310

PROJECT	ANALYTICAL LAB	REQUESTED ANALYSIS	QUANTITY	TYPE OF CONTAINERS
3MRP	BCLABS-BAK	S3ANIONS	1	250 ml Polyethylene
3MRP	BCLABS-BAK	S3METALS	1	500ml Polyethylene
3MRP	BCLABS-BAK	S3METALS:FILTER	0	500ml Polyethylene
3MRP	BCLABS-BAK	S3WETCHEM	2	500ml Polyethylene
3MRP	ALPHAANAL	SM9221:SHO	1	250 ml Sterilized Polyethylene

NO Samples

Entered all CL

Target Sample Date: 13-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-25N-23 AREA INFO: S300/GSA/EGSA

DATE: 13-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23122

PURGE METHOD/SAMPLE METHOD: GF / LVES CONTAMINANT PRESENT: \*TCE-6.0

SCREENED INTERVAL: 21.80 - 36.80 PUMP INTAKE DEPTH: 35.70

CASING DEPTH(calc)/(fbgs): 37.15 / 35.3 DISCHARGE LINE/TCASING HT(in): 1 / 2.50 4.5

DEPTH TO WATER(fbmp): 22.58 on 15-MAY-12 23.35 VOLUME FACTOR: 0.041, 83

WATER IN CASING (ft): 15.22 13.8 CASING VOL (Gal/Time): 0.62 11.5 x 30 = 34.5

TIME PUMP ON: 1101 INITIAL FLOW RATE (Q=GPM): 2.0

TIME PUMP OFF: MEASURED BY: FLOW METER / GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1106	2.0	11.5	1	7.82	22.3	1510	-96	1	25.80
1111	2.0	23	2	7.19	22.4	1503	-57	1	26.77
1116	2.0	34.5	3	7.23	22.4	1518	-49	1	27.23
1118				7.20	22.2	1509	-38	1	
1120				7.19	22.2	1508	-37	1	

METER SERIAL # CALIBRATED  
 pH : 6105114 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O : YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT of REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 1.45 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-25N-23 / 345 TIME COLLECTED: 1125

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
NO → 3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

Added 2.5 oz of CL

Target Sample Date: 13-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-25N-22 AREA INFO: S300/GSA/EGSADATE: 13-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23122PURGE METHOD/SAMPLE METHOD: Grundfos / LVES CONTAMINANT PRESENT: TCE-1.2SCREENED INTERVAL: 20.80 - 30.80 PUMP INTAKE DEPTH: 31.05CASING DEPTH(calc)/(fbgs): 32.50 / 28.5 DISCHARGE LINE/TCASING HT(in): ~~11-2.50~~ 4.5DEPTH TO WATER(fbmp): 24.62 on 15-MAY-12 25.31 VOLUME FACTOR: ~~0.041~~ .83WATER IN CASING (ft): 6.38 7.19 CASING VOL (Gal/Time): ~~0.20~~ .83 6.0 x 3cu = 18 cuTIME PUMP ON: 1011 INITIAL FLOW RATE (Q=GPM): 1.50TIME PUMP OFF: 1031 MEASURED BY: FLOW METER / GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1016	1.5	6	1	7.89	22.6	1556	110	1	28.70
1020	1.5	12	2	7.49	22.3	1561	78	1	30.18
1024	1.3	18	3	7.53	22.5	1561	68	1	30.22
1026				7.52	22.4	1560	63	1	
1028				7.55	22.4	1548	62	1	

METER SERIAL # CALIBRATED  
 pH : 6105114 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O : YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT of REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 1.17 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: - QC LAB(S): - QC SAMPLE TIME: -SAMPLE ID (VERIFY): U-25N-22 / 3045 TIME COLLECTED: 1031

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

NO → 3MRP  
 Sample

Added 1.5 oz of CL

## All Ground Water Sampling Data

Target Sample Date: 14-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-25N-22 AREA INFO: S300/GSA/EGSA

DATE: 14-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA2312P-3

PURGE METHOD/SAMPLE METHOD: Grundfos / <sup>3000</sup>LVES CONTAMINANT PRESENT: TCE-1.2

SCREENED INTERVAL: 20.80 - 30.80 PUMP INTAKE DEPTH: 31.05

CASING DEPTH(calc)/(fbgs): 32.50 / 28.5 DISCHARGE LINE/TCASING HT(in): 1 / 2.50 <sup>4.5</sup>DEPTH TO WATER(fbmp): 24.62 on 15-MAY-12 <sup>25.23</sup> VOLUME FACTOR: 0.041 <sup>4.5.83</sup>WATER IN CASING (ft): 6.38 <sup>7.27</sup> CASING VOL (Gal/Time): 0.26 <sup>6.0x300 = 1800</sup>

TIME PUMP ON: 1138 INITIAL FLOW RATE (Q=GPM): 1.5

TIME PUMP OFF: 1158 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1142	1.5	6	1	7.84	22.8	1563	219	1	28.71
1146	1.5	12	2	7.77	22.4	1571	201	1	30.24
1150	1.5	18	3	7.71	22.4	1570	164	1	30.23
1154				7.68	22.4	1573	129	1	
1156				7.67	22.3	1580	118	1	

METER SERIAL # CALIBRATED  
 pH: 6705114 YES/NO  
 SC: YES/NO  
 mV: YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT OF REAGENT: <sup>100</sup>  
 PURGE VOL/EXCESS H2O DEST: 1.17 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-25N-22 / 3000 TIME COLLECTED: 1158

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

Evacuated all CL



Target Sample Date: 07-Aug-2012 Month: Norm Qtr: 3 Norm Year: 2012  
 WELL ID: W-26R-01 AREA INFO: S300/GSA/EGSA  
 DATE: 07-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23118-9  
 PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: \*TCE-15/NO3-40  
 SCREENED INTERVAL: 22.72 - 27.72 PUMP INTAKE DEPTH: 29.00  
 CASING DEPTH(calc)/(fbgs): 30.00 / 29.8 CASING DIAMETER/TCASING HT(in): 4.5 / 2.67  
 DEPTH TO WATER(fbmp): 20.48 on 15-MAY-12 21.36 VOLUME FACTOR: 0.826  
 WATER IN CASING (ft): 11.99 8.64 CASING VOL (Gal/Time): 9.91 7.1 x 3.0 = 21.3  
 TIME PUMP ON: 1211 INITIAL FLOW RATE (Q=GPM): 1.3  
 TIME PUMP OFF: 1250 MEASURED BY: FLOW METER / GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1218	1.3	7.1	1	7.65	23.6	1467	678	1	NM
1225	1.0	14.2	2	7.64	23.0	1473	391	1	NM
1233	1.0	21.3	3	7.63	22.9	1474	320	1	NM
1235				7.60	22.9	1472	289	1	NM
1237				7.62	22.9	1470	273	1	
1244				7.60	22.9	1482	270	1	
1246				7.61	23.1	1484	264	1	

METER SERIAL # 6205114 CALIBRATED  
 pH: YES/NO  
 SC: YES/NO  
 mV: YES/NO  
 H2O: YES/NO  
 SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP  
 SAMPLE PRESERVATION/AMT of REAGENT: AK  
 PURGE VOL/EXCESS H2O DEST: 29.72 / TF-834  
 TF LOCATION: 834

QC SAMPLE ID: 60 QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-26R-01 / 21.36 TIME COLLECTED: 1250

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEN		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

Evacuated all CL

NO WL'S WL WAS BELOW PUMP

Target Sample Date: 08-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-26R-01 AREA INFO: S300/GSA/EGSA

DATE: 08-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA231534

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: \*TCE-15/N03-40

SCREENED INTERVAL: 22.72 - 27.72 PUMP INTAKE DEPTH: 29.00

CASING DEPTH(calc)/(fbgs): 30.00 / 29.8 CASING DIAMETER/TCASING HT(in): 4.5 / 2.67

DEPTH TO WATER(fbmp): 21.12 on 22-AUG-12 21.43 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 11.35 8.37 CASING VOL (Gal/Time): 9.38 6.9 + 3.0 = 20.7

TIME PUMP ON: 1104 INITIAL FLOW RATE (Q=GPM):

TIME PUMP OFF: 1139 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1111	1.0	6.9	1	7.59	23.1	1534	749	1	25.01
1118	1.0	13.8	2	7.49	23.5	1517	740	1	25.43
1124	1.0	20.7	3	7.46	23.5	1491	710	1	25.77
1126	1.3			7.60	22.8	1475	515	1	26.90
1128	1.3			7.59	22.9	1475	443	1	27.30
1134				7.60	22.7	1477	310	1	28.88

METER SERIAL # CALIBRATED  
 pH: 6205430 YES/NO  
 SC: YES/NO  
 mV: YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG  
 SAMPLE PRESERVATION/AMT of REAGENT: 11/4  
 PURGE VOL/EXCESS H2O DEST: 28.13 / TF-834  
 TF LOCATION: 834

QC SAMPLE ID: W-26R-49Y QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1058

SAMPLE ID (VERIFY): W-26R-01/3043 TIME COLLECTED: 1139

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Evacuated all CL from well

Target Sample Date: 07-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-26R-01 AREA INFO: S300/GSA/EGSA

DATE: 07-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23153

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: \*TCE-15/NO3-40

SCREENED INTERVAL: 22.72 - 27.72 PUMP INTAKE DEPTH: 29.00

CASING DEPTH(calc)/(fbgs): 30.00 / 29.8 CASING DIAMETER/TCASING HT(in): 4.5 / 2.67

DEPTH TO WATER(fbmp): 21.12 on 22-AUG-12 21.65 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 11.35 8.35 CASING VOL (Gal/Time): 9.38 6.8 x 300 = 20.76

TIME PUMP ON: 1056 INITIAL FLOW RATE (Q=GPM): 1.0

TIME PUMP OFF: 1116 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1102	1.	6.9	1	7.63	23.1	1477	94	1	24.95
1104	1.	13.8	2	7.59	23.4	1476	33	1	25.40
1116	1.	20.7	3	7.59	23.7	1472	21	1	25.82
1118	1.			7.56	23.6	1474	18	1	
1120	1.			7.54	23.1	1471	20	1	

METER SERIAL # CALIBRATED  
 pH : 6205430 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG  
 SAMPLE PRESERVATION/AMT OF REAGENT: N/A  
 PURGE VOL/EXCESS H2O DEST: 28.13 / TF-834  
 TF LOCATION: 834

QC SAMPLE ID: W-26R-49Y QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1018

SAMPLE ID (VERIFY): W-26R-01 / 305 TIME COLLECTED: 1126

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
NO SW 3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Added 20 02 of CC

Target Sample Date: 09-Aug-2012 Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-26R-05 AREA INFO: S300/GSA/EGSA

DATE: 09-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23118

PURGE METHOD/SAMPLE METHOD: PB / 90BA CONTAMINANT PRESENT: TCE-3.3/NO3-53

SCREENED INTERVAL: 22.05 - 27.05 INTAKE DEPTH: 0.00

CASING DEPTH(calc)/(fbgs): 26.68 / 25.5 CASING DIAMETER/TCASING HT(in): 4.5 / 1.50

DEPTH TO WATER(fbmp): 24.39 on 15-MAY-12 26.20 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 2.61 .48 CASING VOL (Gal/Time): 2.16 .39 x 90% = .35

TIME PUMP ON: INITIAL FLOW RATE (Q=GPM):

TIME PUMP OFF: MEASURED BY: FLOW METER / GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1054		.35	90%	7.91	21.0	1079	162	1	16.43

METER SERIAL # CALIBRATED SAMPLER/EMPLOYER: silva90

pH: 6705114 YES/NO PROJECT: 3MRP

SC: YES/NO SAMPLE PRESERVATION/AMT of REAGENT: 20

mV: YES/NO PURGE VOL/EXCESS H2O DEST: 1.94 / S300-DRUM

H2O: YES/NO TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-26R-05 TIME COLLECTED: 1101

PROJECT / ANALYTICAL LAB / REQUESTED ANALYSIS / QUANTITY / TYPE OF CONTAINERS

3MRP BCLABS-BAK E245.2 1 1 L Polyethylene

3MRP BCLABS-BAK S3ANIONS 1 250 ml Polyethylene

3MRP BCLABS-BAK S3METALS 1 500ml Polyethylene

3MRP BCLABS-BAK S3METALS:FILTER 0 500ml Polyethylene

3MRP BCLABS-BAK S3WETCHEM 2 500ml Polyethylene

3MRP ALPHAANAL SM9221:SHO 1 250 ml Sterilized Polyethylene

NO sample

Evacuated all CL after 100 days of purge following  
Sampling and chlorination on 8/6/12.  
See other sheet for parameter readings

Target Sample Date: 12-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-26R-05 AREA INFO: S300/GSA/EGSADATE: 12-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23155PURGE METHOD/SAMPLE METHOD: PB / 90BA CONTAMINANT PRESENT: TCE-3.3/NO3-53SCREENED INTERVAL: 22.05 - 27.05 INTAKE DEPTH: 0.00CASING DEPTH(calc)/(fbgs): 26.68 / 25.5 CASING DIAMETER/TCASING HT(in): 4.5 / 1.50DEPTH TO WATER(fbmp): 23.91 on 22-AUG-12 24.64 VOLUME FACTOR: 0.826WATER IN CASING (ft): 3.09 2.04 CASING VOL (Gal/Time): 2.55 1.7 x 90% = 1.53 GalTIME PUMP ON: 1110 INITIAL FLOW RATE (Q=GPM):                     TIME PUMP OFF:                      MEASURED BY: FLOW METER/ GRAD CYL. / BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1110		1.51	30%	7.81	19.6	1086	194	1	25.21
1113		1.02	60%	7.68	20.2	1076	195	1	25.49
1115		1.53	90%	7.65	20.1	1080	193	1	25.72

METER SERIAL # CALIBRATED SAMPLER/EMPLOYER: silva90  
 pH: 6.1553-10 YES/NO PROJECT: 3EMG  
 SC: YES/NO SAMPLE PRESERVATION/AMT of REAGENT: N/A  
 mV: YES/NO PURGE VOL/EXCESS H2O DEST: 2.30 / S300-DRUM  
 H2O: YES/NO TF LOCATION: S300

QC SAMPLE ID: EGSAFB QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1114SAMPLE ID (VERIFY): W-26R-05/90BA TIME COLLECTED: 1114

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0: NO3		1		250 ml Polyethylene
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Added 3.02 of CL

## NOTE:

Purge rate/time: N/A since est sus\_flow = 0

Purge Volume: 10 gal.

Revision: 07/08/2011

Target Sample Date: 15-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-26R-05 AREA INFO: S300/GSA/EGSA

DATE: 15-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23155

PURGE METHOD/SAMPLE METHOD: PB / 90BA CONTAMINANT PRESENT: TCE-3.3/NO3-53

SCREENED INTERVAL: 22.05 - 27.05 INTAKE DEPTH: 0.00

CASING DEPTH(calc)/(fbgs): 26.68 / 25.5 CASING DIAMETER/TCASING HT(in): 4.5 / 1.50

DEPTH TO WATER(fbmp): 23.91 on 22-AUG-12 26.29 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 3.09 1.39 CASING VOL (Gal/Time): 2.55 1.32 x 90% = 28

TIME PUMP ON: - INITIAL FLOW RATE (Q=GPM):

TIME PUMP OFF: - MEASURED BY: FLOW METER/ GRAD CYL. BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1357		.28	90%	7.68	20.0	1073	181	1	26.38

METER SERIAL # CALIBRATED SAMPLER/EMPLOYER: silva90  
 pH : 6705310 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO  
 PROJECT: 3EMG  
 SAMPLE PRESERVATION/AMT of REAGENT: N/A  
 PURGE VOL/EXCESS H2O DEST: 2.30 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: EGSAFB QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1408

SAMPLE ID (VERIFY): W-26R-05 90BA TIME COLLECTED: 1408

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
NO Sample 3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

UNSUCCESSFUL in purging CL out of well on 11/13 or 11/14  
 on 11/15 today was able to clear all CL from well.

used "BC" Blank Water for field Blank

NOTE:  
 Purge rate/time: N/A since est\_sus\_flow = 0  
 Purge Volume: 10 gal.  
 Revision: 07/08/2011

Target Sample Date: 07-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-26R-11 AREA INFO: S300/GSA/EGSA

DATE: 07-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23118

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: TCE-1.6/M03-14

SCREENED INTERVAL: 18.08 - 28.08 PUMP INTAKE DEPTH: 31.08

CASING DEPTH(calc)/(fbgs): 29.28 / 27 CASING DIAMETER/TCASING HT(in): 4.5 / 1.98

DEPTH TO WATER(fbmp): 17.93 on 15-MAY-12 18.55 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 11.05 11.32 CASING VOL (Gal/Time): 9.13  $9.3 \times 300 = 27.9 \text{ Gal}$ 

TIME PUMP ON: 1307 INITIAL FLOW RATE (Q=GPM): 2.0

TIME PUMP OFF: MEASURED BY: FLOW METER GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1312		9.3	1	7.57	23.1	1403	225	1	18.70
1317		18.6	2	7.49	22.8	1419	218	1	19.07
1322		27.9	3	7.50	22.9	1423	196	1	19.08
1324				7.47	22.8	1420	187	1	
1326				7.47	22.8	1422	180	1	

METER SERIAL # 6205114 CALIBRATED  
 pH : YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP 3GIV  
 SAMPLE PRESERVATION/AMT of REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 27.39 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: W-26R-48Y QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1353

SAMPLE ID (VERIFY): W-26R-11/3092 TIME COLLECTED: 1330

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3GIV		BCLABS-BAK		E601		3		40 mL Glass VOA vial
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

NO  
Samples

Evacuated all CL

Target Sample Date: 07-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-26R-11 AREA INFO: S300/GSA/EGSA

DATE: 07-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23153

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: TCE-1.6/NO3-14

SCREENED INTERVAL: 18.08 - 28.08 PUMP INTAKE DEPTH: 31.08

CASING DEPTH(calc)/(fbgs): 29.28 / 27 CASING DIAMETER/TCASING HT(in): 4.5 / 1.98

DEPTH TO WATER(fbmp): 17.41 on 22-AUG-12 19.21 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 11.57 10.07 CASING VOL (Gal/Time): 9.56  $9.3 \times 3.2 = 24.9$ 

TIME PUMP ON: 1142 INITIAL FLOW RATE (Q=GPM): 1.02

TIME PUMP OFF: 1217 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1150	1	8.5	1	7.47	24.2	1407	-23	1	19.21
1158	1	16.6	2	7.41	24.2	1409	-8	1	19.24
1207	1	24.9	3	7.42	24.3	1413	-12	1	19.25
1209				7.40	24.2	1418	-10	1	
1211				7.40	24.2	1416	-08	1	

METER SERIAL # CALIBRATED  
 pH : 6705430 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O : YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG 3GIV  
 SAMPLE PRESERVATION/AMT of REAGENT: N/A  
 PURGE VOL/EXCESS H2O DEST: 28.68 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-26R-11 348 TIME COLLECTED: 1217

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG	/	BCLABS-BAK	/	E120.1	/	1	/	250 ml Polyethylene
3EMG	/	BCLABS-BAK	/	E150.1	/	1	/	250 ml Polyethylene
3EMG	/	BCLABS-BAK	/	E300.0:NO3	/	1	/	250 ml Polyethylene
3GIV	/	BCLABS-BAK	/	E601	/	3	/	40 mL Glass VOA vial
3EMG	/	ALPHAANAL	/	SM9221	/	1	/	250 ml Sterilized Polyethylene

Added 2.0 oz of EL



Target Sample Date: 08-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-26R-11 AREA INFO: S300/GSA/EGSA

DATE: 08-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23153-4

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: TCE-1.6/NO3-14

SCREENED INTERVAL: 18.08 - 28.08 PUMP INTAKE DEPTH: 31.08

CASING DEPTH(calc)/(fbgs): 29.28 / 27 CASING DIAMETER/TCASING HT(in): 4.5 / 1.98

DEPTH TO WATER(fbmp): 17.41 on 22-AUG-12 19.21 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 11.57 CASING VOL (Gal/Time): 9.56  $8.3 \times 300 = 24.9$ 

TIME PUMP ON: 1159 INITIAL FLOW RATE (Q=GPM): 1.0

TIME PUMP OFF: 1231 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1208		8.3	1	7.48	23.0	1420	260	1	19.24
1216		16.6	2	7.49	23.1	1418	229	1	19.25
1224		24.9	3	7.48	23.2	1416	202	1	19.25
1226				7.44	23.1	1411	201	1	
1228				7.44	23.1	1414	200	1	

METER SERIAL # CALIBRATED  
 pH : 6105430 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG 3GIV  
 SAMPLE PRESERVATION/AMT of REAGENT: NA  
 PURGE VOL/EXCESS H2O DEST: 28.68 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-26R-11 / 3VES TIME COLLECTED: 1231

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
NO Sample { 3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3GIV		BCLABS-BAK		E601		3		40 mL Glass VOA vial
3EMG		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Evacuated all CL from well

All Ground Water Sampling Data

Target Sample Date: 08-Aug-2012 Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-7DS AREA INFO: S300/GSA/EGSA

DATE: 08-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23120

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: ND

SCREENED INTERVAL: 18.80 - 28.80 PUMP INTAKE DEPTH: 27.80

CASING DEPTH(calc)/(fbgs): 30.30 / 27 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fhmp): 17.70 on 15-MAY-12 17.45 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 12.30 12.35 CASING VOL (Gal/Time): 10.16 10.2 x 30 = 30.6 Gal

TIME PUMP ON: 1027 INITIAL FLOW RATE (Q=GPM): 2.0 G

TIME PUMP OFF: 1052 MEASURED BY: FLOW METER GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1033		10.2	1	7.71	21.4	1524	140	1	18.05
1038		20.4	2	7.47	20.4	1537	135	1	18.10
1043		30.6	3	7.43	20.5	1539	132	1	18.10
1045				7.40	20.3	1540	127	1	
1047				7.41	20.3	1537	123	1	

METER SERIAL # 6205114 CALIBRATED YES/NO

pH : YES/NO

SC : YES/NO

mV : YES/NO

H2O: YES/NO

SAMPLER/EMPLOYER: silva90

PROJECT: 3MRP 3GIV

SAMPLE PRESERVATION/AMT of REAGENT: NA

PURGE VOL/EXCESS H2O DEST: 30.49 / S300-DRUM

TF LOCATION: S300

QC SAMPLE ID: EGSAFB QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1052

SAMPLE ID (VERIFY): W-7DS / 3047 TIME COLLECTED: 1052

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3GIV		BCLABS-BAK		E601		3		40 mL Glass VOA vial
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
NO → 3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

single

Added 2.5 oz. of CL

## All Ground Water Sampling Data

Target Sample Date: 09-Aug-2012

Month: Norm Qtr: 3 Norm Year: 2012

WELL ID: W-7DS AREA INFO: S300/GSA/EGSA

DATE: 09-Aug-2012 LOG BOOK (DOCUMENT CONTROL) #: AA231267

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: ND

SCREENED INTERVAL: 18.80 - 28.80 PUMP INTAKE DEPTH: 27.80

CASING DEPTH(calc)/(fbgs): 30.30 / 27 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fbmp): 17.70 on 15-MAY-12 18.02 VOLUME FACTOR: 0.826

WATER IN CASING (ft): 12.30 12.28 CASING VOL (Gal/Time): 10.16 10.1 x 300 = 30.3

TIME PUMP ON: 1115 INITIAL FLOW RATE (Q=GPM): 2.0 Q

TIME PUMP OFF: 1143 MEASURED BY: FLOW METER / GRAD CYL. / BUCKET / OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1120	2.0	10.1	1	8.08	21.1	1522	137	1	18.07
1125	2.0	20.2	2	7.49	20.7	1533	161	1	18.11
1130	2.0	30.3	3	7.43	20.9	1535	157	1	18.12
1135				7.44	20.9	1535	154	1	18.14
1137				7.44	20.8	1532	150	1	
1139				7.41	20.8	1529	147	1	

METER SERIAL # CALIBRATED  
 pH : 6205114 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O : YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3MRP 3GIV  
 SAMPLE PRESERVATION/AMT of REAGENT: 177  
 PURGE VOL/EXCESS H2O DEST: 30.49 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: EGSAFB QC LAB(S): BCLABS-BAK, ALPHAANAL QC SAMPLE TIME: 1143

SAMPLE ID (VERIFY): W-7DS / 3VES TIME COLLECTED: 1143

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3MRP		BCLABS-BAK		E245.2		1		1 L Polyethylene
3GIV		BCLABS-BAK		E601		3		40 mL Glass VOA vial
3MRP		BCLABS-BAK		S3ANIONS		1		250 ml Polyethylene
3MRP		BCLABS-BAK		S3METALS		1		500ml Polyethylene
3MRP		BCLABS-BAK		S3METALS:FILTER		0		500ml Polyethylene
3MRP		BCLABS-BAK		S3WETCHEM		2		500ml Polyethylene
3MRP		ALPHAANAL		SM9221:SHO		1		250 ml Sterilized Polyethylene

Evacuated all CL  
 Used BC "BW" for EGSAFB

Target Sample Date: 07-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-7DS AREA INFO: S300/GSA/EGSA

DATE: 07-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA23153

PURGE METHOD/SAMPLE METHOD: GF / 3VES CONTAMINANT PRESENT: ND

SCREENED INTERVAL: 18.80 - 28.80 PUMP INTAKE DEPTH: 27.80

CASING DEPTH(calc)/(fbgs): 30.30 / 27 CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fbmp): 17.23 on 22-AUG-12 18.57 // VOLUME FACTOR: 0.826

WATER IN CASING (ft): 12.77 11.73 CASING VOL (Gal/Time): 10.55  $9.7 \times 30 = 29.1 \text{ CL}$ 

TIME PUMP ON: 1224 INITIAL FLOW RATE (Q=GPM): 2.8

TIME PUMP OFF: 1246 MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1224		9.7	1	7.42	22.1	1537	63	1	18.64
1231		19.4	2	7.41	22.2	1535	63	1	18.65
1235		29.1	3	7.41	22.1	1536	63	1	18.65
1237				7.38	22.1	1537	66	1	
1239				7.39	22.1	1536	67	1	

METER SERIAL # CALIBRATED  
 pH : 0105420 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: 3EMG 3CMP  
 SAMPLE PRESERVATION/AMT of REAGENT: N/A  
 PURGE VOL/EXCESS H2O DEST: 31.65 / S300-DRUM  
 TF LOCATION: S300

QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): W-7DS/3065 TIME COLLECTED: 1246

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
3EMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
3EMG		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
3CMP		BCLABS-BAK		E601		3		40 mL Glass VOA vial
W-7DS		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Added 2.0 oz of CL

Target Sample Date: 08-Nov-2012

Month: Norm Qtr: 4 Norm Year: 2012

WELL ID: W-7DS

AREA INFO: S300/GSA/EGSA

DATE: 08-Nov-2012 LOG BOOK (DOCUMENT CONTROL) #: AA231594

PURGE METHOD/SAMPLE METHOD: GF / 3VES

CONTAMINANT PRESENT: ND

SCREENED INTERVAL: 18.80 - 28.80

PUMP INTAKE DEPTH: 27.80

CASING DEPTH(calc)/(fbgs): 30.30 / 27

CASING DIAMETER/TCASING HT(in): 4.5 / 3.00

DEPTH TO WATER(fbmp): 17.23 on 22-AUG-12 18.60

VOLUME FACTOR: 0.826

WATER IN CASING (ft): 12.77 11.70

CASING VOL (Gal/Time): 10.55 9.7 X 305 = 29.1 Gal

TIME PUMP ON: 1250

INITIAL FLOW RATE (Q=GPM): 2.8

TIME PUMP OFF: 1308

MEASURED BY: FLOW METER/ GRAD CYL./ BUCKET/ OTHER

TIME	Q	GAL PURGED	VOLUMES	pH	TEMP C	SC	mV	OG	DTW
1251		9.7	1	7.47	21.8	1538	394	1	18.65
1257		19.4	2	7.43	21.9	1537	303	1	18.65
1300		29.1	3	7.40	21.9	1530	289	1	18.67
1302				7.40	21.9	1521	272	1	
1304				7.41	21.9	1532	270	1	

METER SERIAL # CALIBRATED  
 pH : 6205430 YES/NO  
 SC : YES/NO  
 mV : YES/NO  
 H2O: YES/NO

SAMPLER/EMPLOYER: silva90  
 PROJECT: JEMG 3CMP  
 SAMPLE PRESERVATION/AMT OF REAGENT: 1/14  
 PURGE VOL/EXCESS H2O DEST: 11.65 / S300-DRUM  
 TF LOCATION: S300

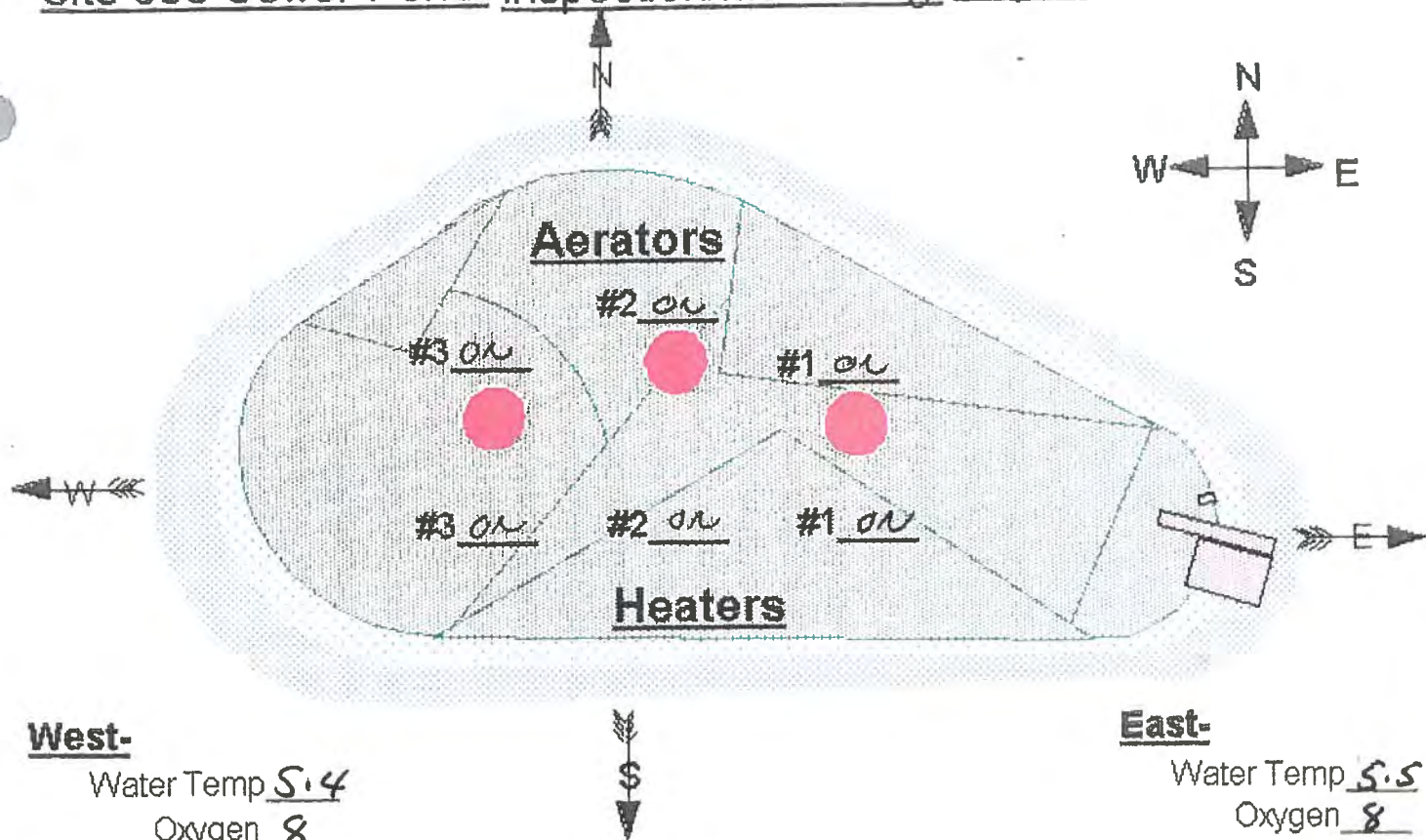
QC SAMPLE ID: QC LAB(S): QC SAMPLE TIME:

SAMPLE ID (VERIFY): 12-7DS/304S TIME COLLECTED: 308

PROJECT	/	ANALYTICAL LAB	/	REQUESTED ANALYSIS	/	QUANTITY	/	TYPE OF CONTAINERS
NO } JEMG		BCLABS-BAK		E120.1		1		250 ml Polyethylene
Sample } JEMG		BCLABS-BAK		E150.1		1		250 ml Polyethylene
		BCLABS-BAK		E300.0:NO3		1		250 ml Polyethylene
		BCLABS-BAK		E601		3		40 mL Glass VOA vial
JCMP		ALPHAANAL		SM9221		1		250 ml Sterilized Polyethylene

Evacuated all CC from well

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 5.4  
Oxygen 8  
pH 9.34  
Time 0600

## East-

Water Temp 5.5  
Oxygen 8  
pH 9.35  
Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion same

Animal Burrows same

Weed Control same

## ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion same

Animal Burrows same

Weed Control same

Inspected by Dan Arnold

12-20-12  
Date

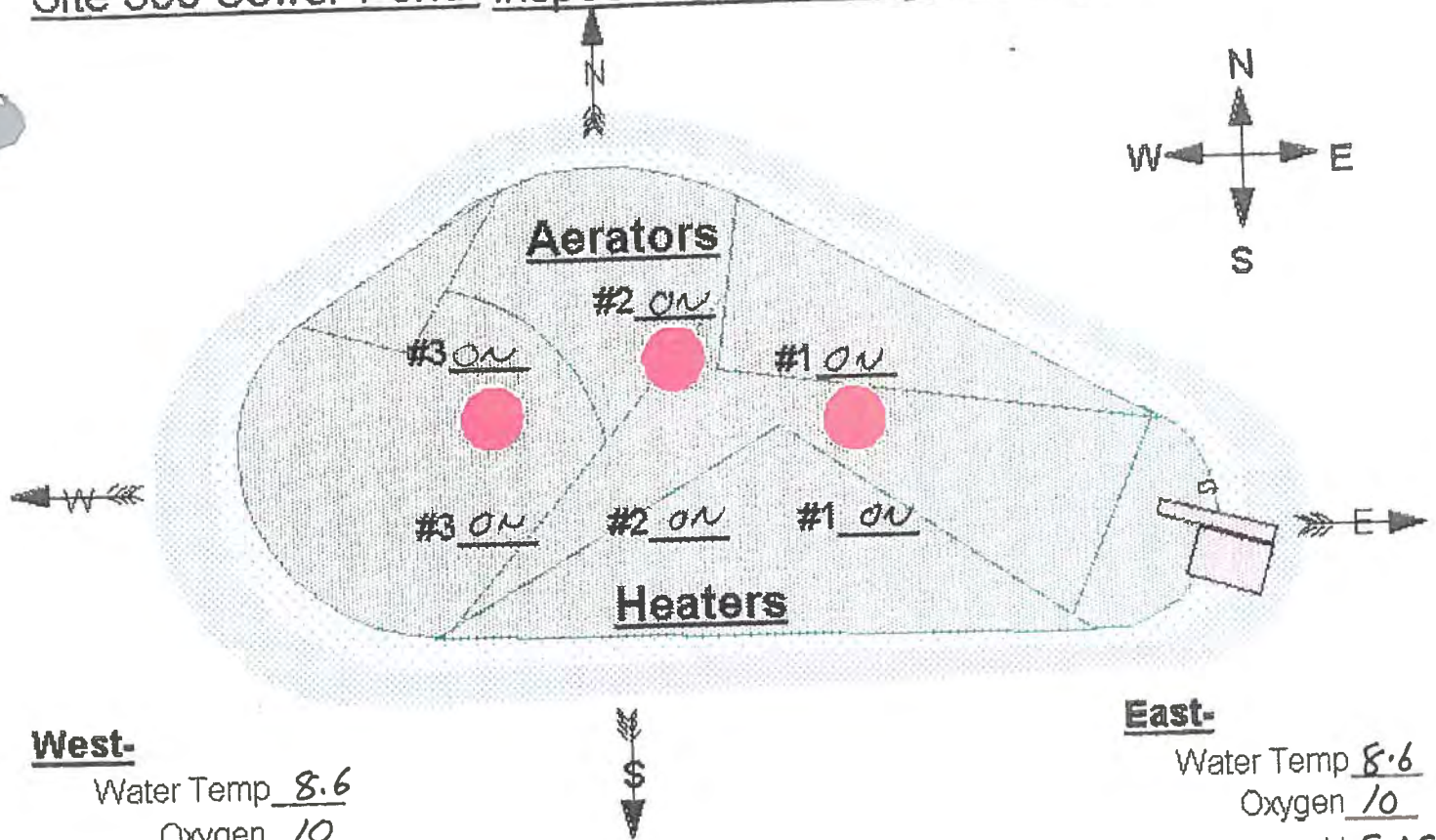
Supervisor Review Dan Arnold

1-7-13  
Date

Comments \_\_\_\_\_



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 8.6  
Oxygen 10  
pH 9.28  
Time 0600

## East-

Water Temp 8.6  
Oxygen 10  
pH 9.29  
Time 0630

Water Level 45"  
Water Meter-Stop 7794455  
Water Meter-Start 7794455

## COLOR----

Green ☒  
Green Brown ☐  
Brown Green ☐  
Brown ☐

Common Bacterium-Per Drop ☐  
Activated Sludge ☐  
Glass Tube Test ☒

Water Added 0  
Air Temp. 2.2  
Wind Direction None

## ODOR----1 SLIGHT

Erosion Some  
Animal Burrows Some  
Weed Control Some

## Percolation Pond

Water Level- NOT FLOWING  
Erosion SOME  
Animal Burrows SOME  
Weed Control SOME

[Signature]  
Inspected by

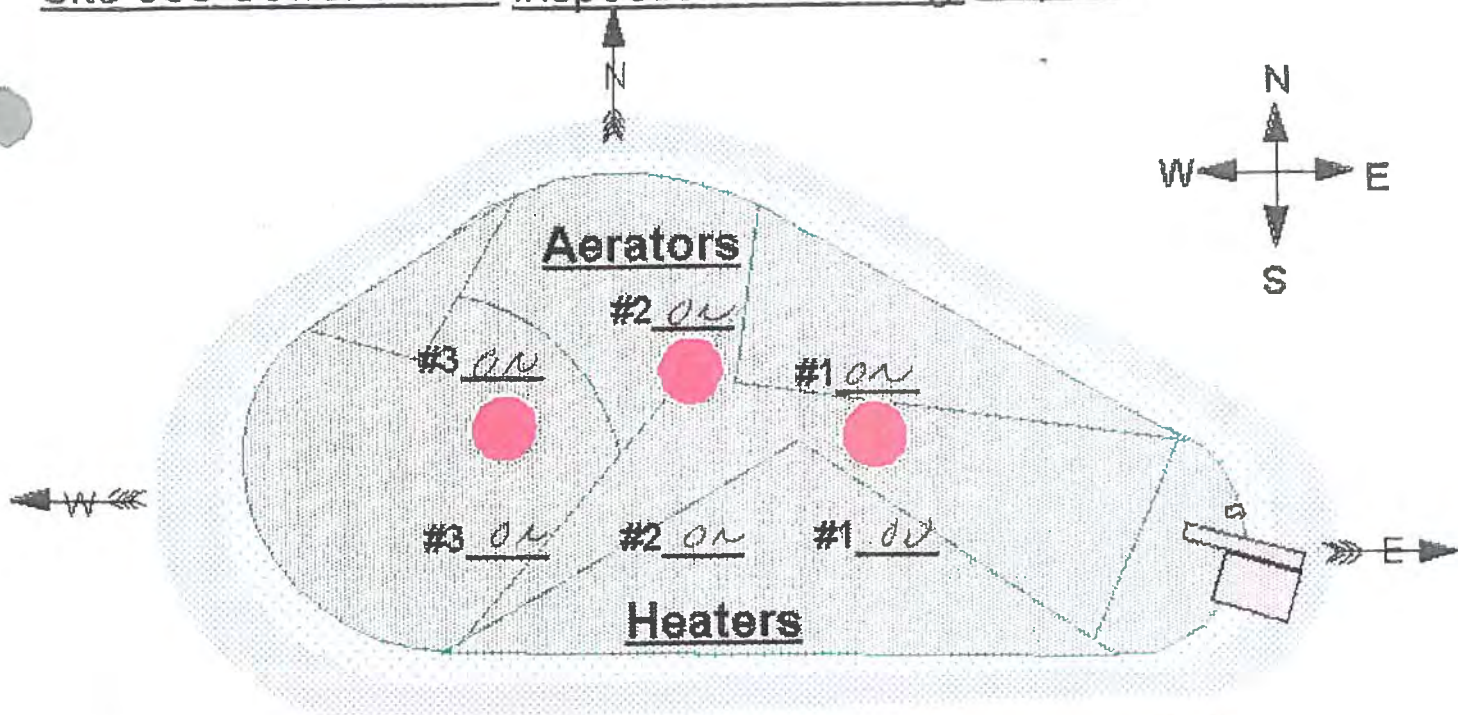
12-13-12  
Date

[Signature]  
Supervisor Review

12-13-12  
Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 12.1

Oxygen 6

pH 9.16

Time 0600

Water Level +5"

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp. 12.2

Wind Direction None

## East-

Water Temp 11.8

Oxygen 6

pH 9.11

Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion Some

Animal Burrows Some

Weed Control Some

## ODOR----1 SLIGHT

## Percolation Pond

Water Level- NOT Flowing

Erosion Some

Animal Burrows Some

Weed Control Some

Inspector  
Inspected by

12-6-12  
Date

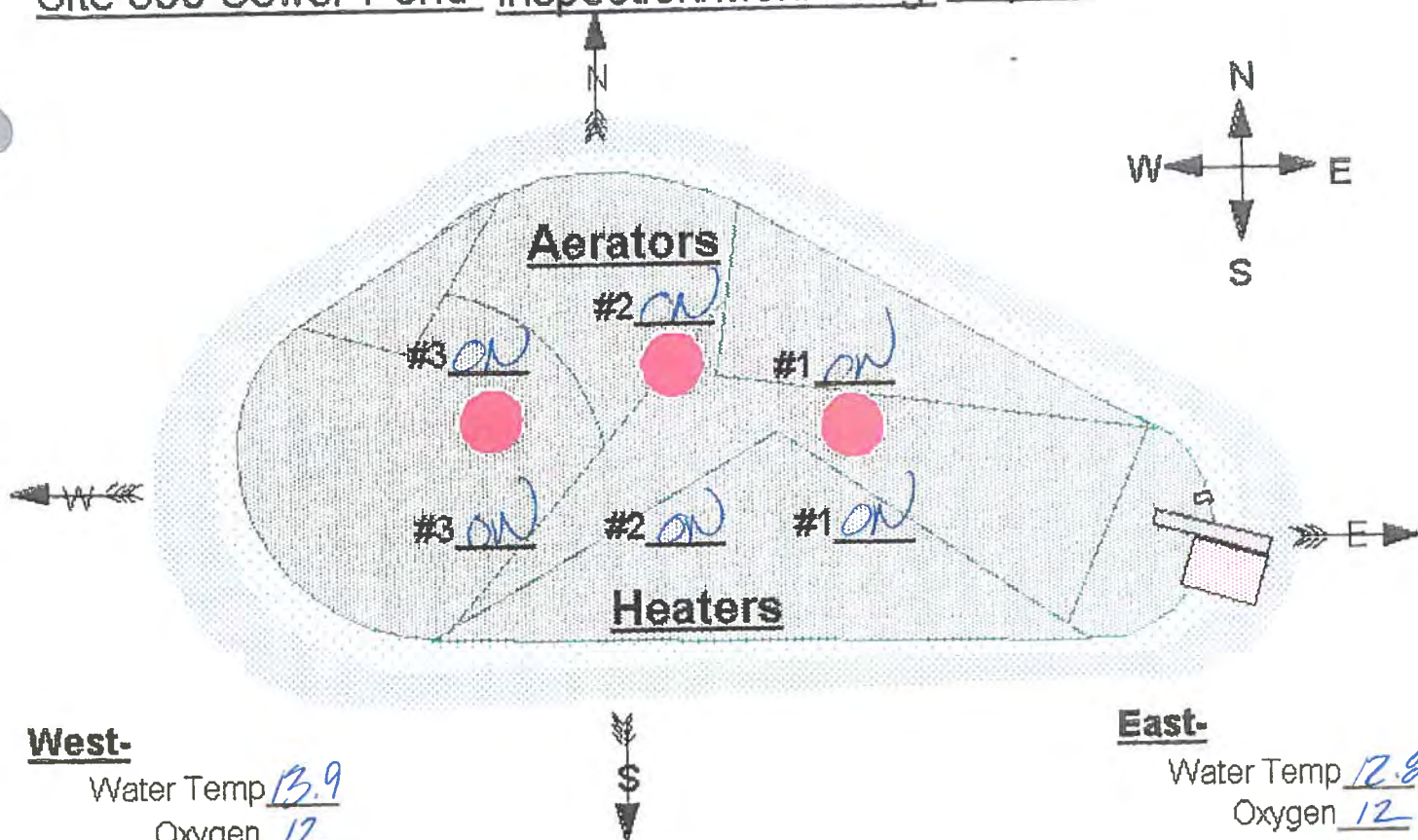
Supervisor  
Supervisor Review

12-11-12  
Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 13.9  
Oxygen 12  
pH 9.02  
Time 1400

## East-

Water Temp 12.8  
Oxygen 12  
pH 9.12  
Time 1400

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion some

Animal Burrows some

Weed Control some

Water Level +2 3/4

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp 16.7

Wind Direction E to W

ODOR---- slight

## Percolation Pond

Water Level not flowing

Erosion some

Animal Burrows some

Weed Control some

Inspected by Arc Annenkov

12-3-12

Date

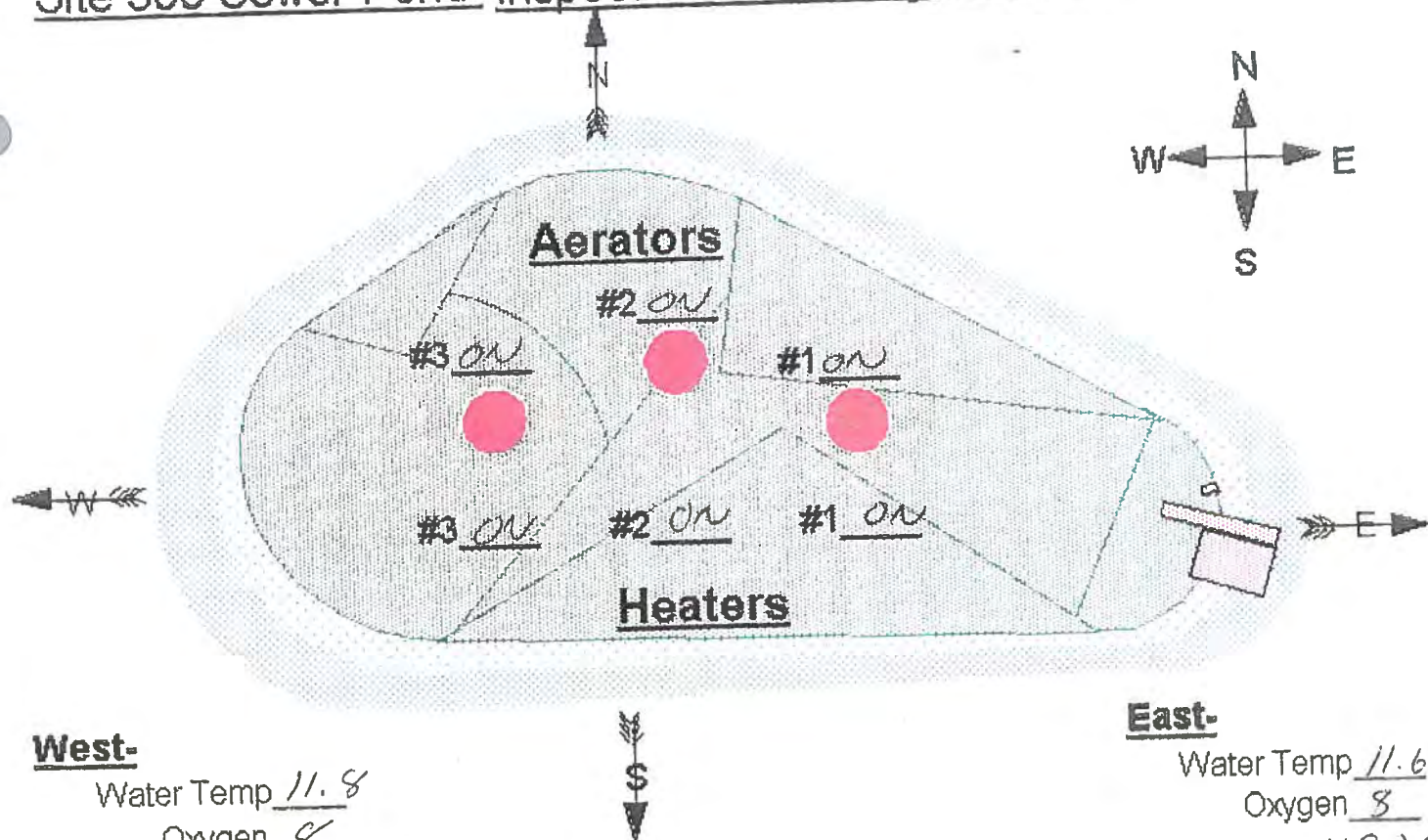
Supervisor Review Arc Annenkov

12-3-12

Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 11.8  
Oxygen 8  
pH 9.24  
Time 0600

## East-

Water Temp 11.6  
Oxygen 8  
pH 9.26  
Time 0630

## COLOR----

Water Level + 2 3/4"  
Water Meter-Stop 7794455  
Water Meter-Start 7794455

Green ☒  
Green Brown ☐  
Brown Green ☐  
Brown ☐

Common Bacterium-Per Drop ☐  
Activated Sludge ☒  
Glass Tube Test ☐

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## ODOR----SLIGHT

Water Added 0

Air Temp. 12-2

Wind Direction NONE

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Deon Ford  
Inspected by

11-29-12  
Date

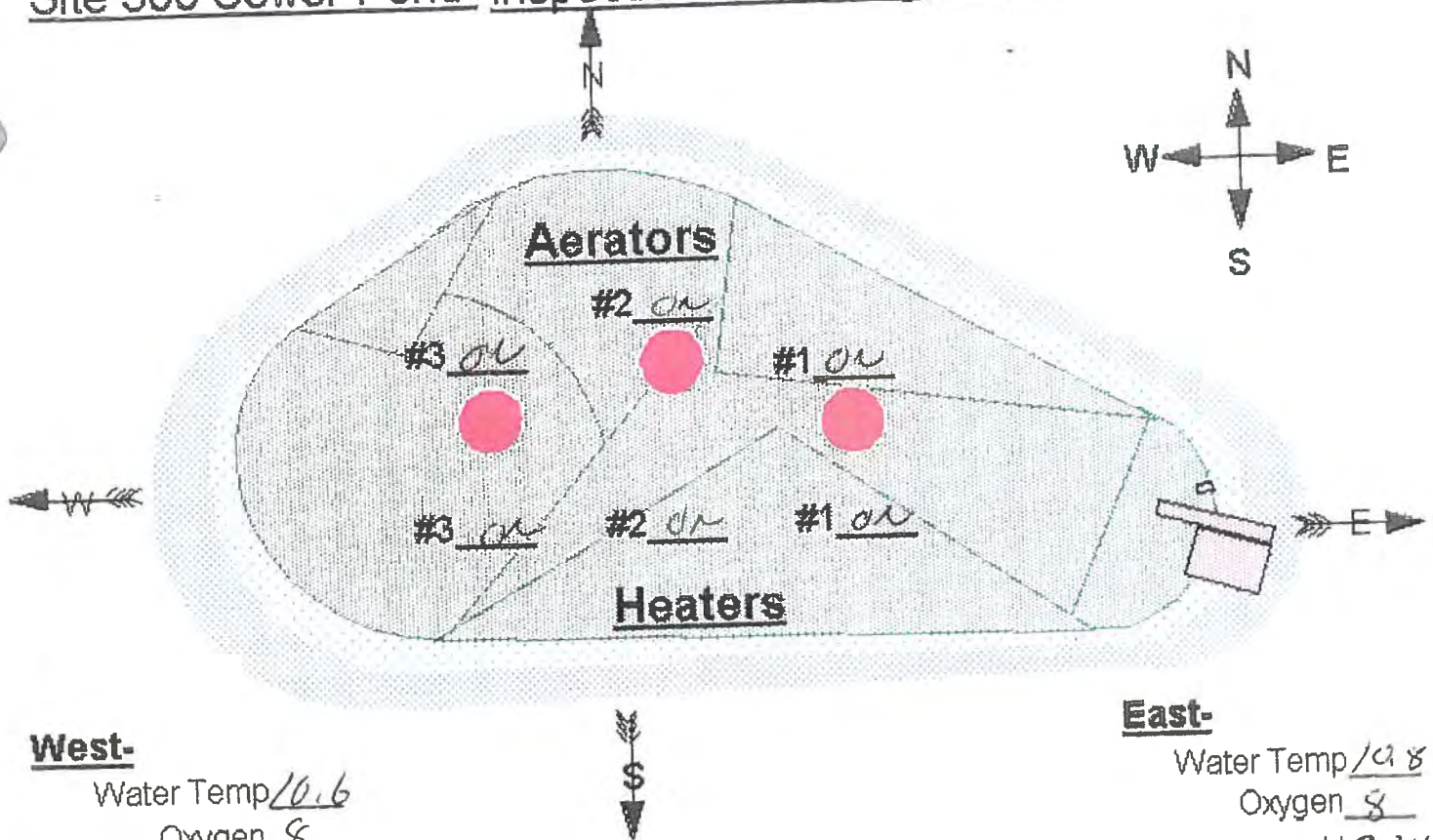
1 Dave Anderson  
Supervisor Review

11-29-12  
Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 10.6  
Oxygen 8  
pH 9.31  
Time 0600

## East-

Water Temp 11.8  
Oxygen 8  
pH 9.34  
Time 0630

## COLOR----

Water Level +2 1/2'  
Water Meter-Stop 7794455  
Water Meter-Start 7794455

Green ☒  
Green Brown ☐  
Brown Green ☐  
Brown ☐

Common Bacterium-Per Drop ☐  
Activated Sludge ☐  
Glass Tube Test ☒

Water Added 0  
Air Temp. 8.3

## ODOR----SLIGHT

Wind Direction NONE

Erosion SOME  
Animal Burrows SOME  
Weed Control SOME

## Percolation Pond

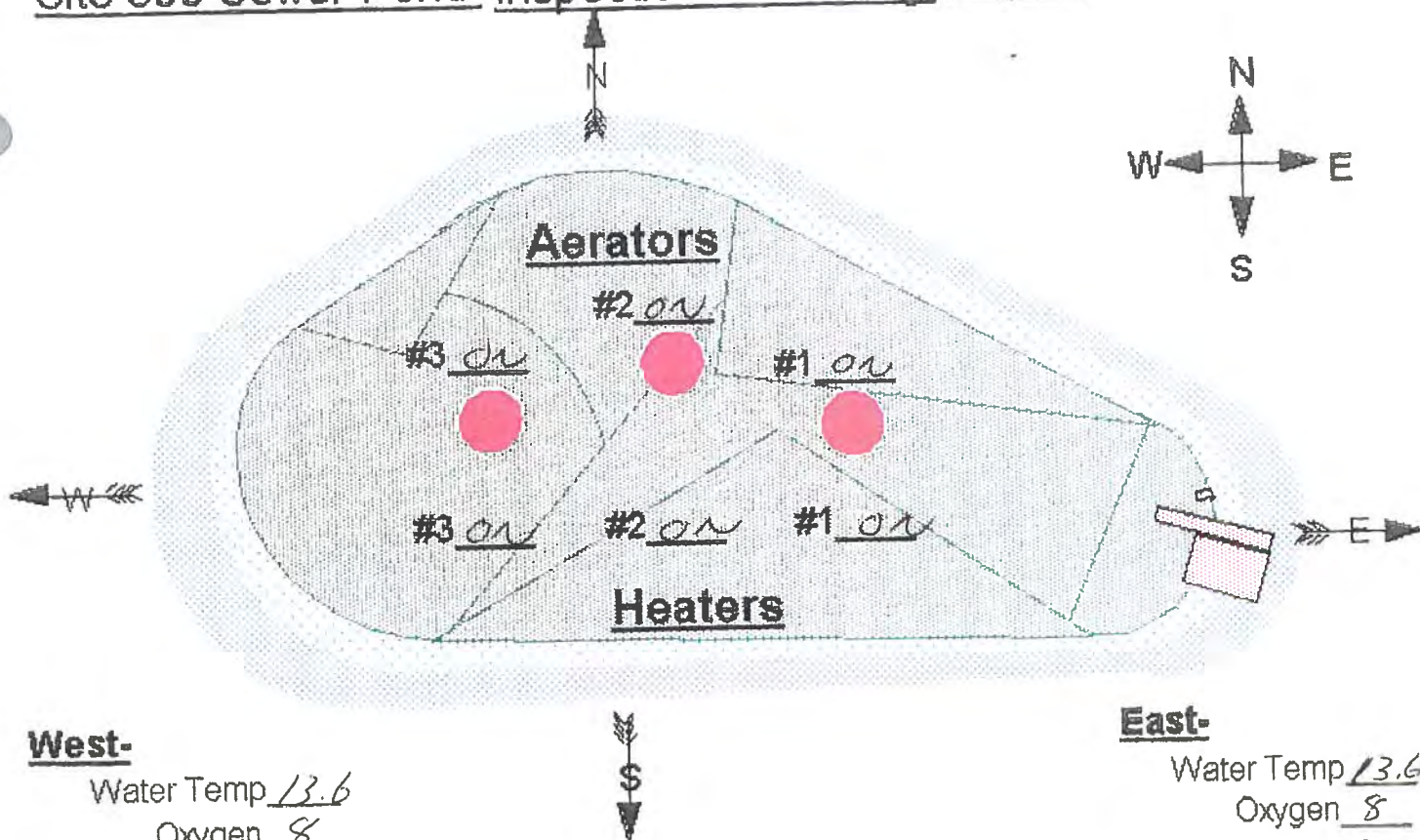
Water Level- NOT FLOWING  
Erosion SOME  
Animal Burrows SOME  
Weed Control SOME

Pronto  
Inspected by  
Dan Anderson  
Supervisor Review

11-27-12  
Date  
11-27-12  
Date

## Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 13.6  
 Oxygen 8  
 pH 9.27  
 Time 0600

## East-

Water Temp 13.6  
 Oxygen 8  
 pH 9.30  
 Time 0630

## COLOR----

Water Level +2 3/4"  
 Water Meter-Stop 7794455  
 Water Meter-Start 7794455

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Water Added 0  
 Air Temp. 10.00  
 Wind Direction NONE

## ODOR----SLIGHT

Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING  
 Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

Deane Land  
 Inspected by

11.22-12  
 Date

Dave Anderson  
 Supervisor Review

12-3-12  
 Date

## Comments

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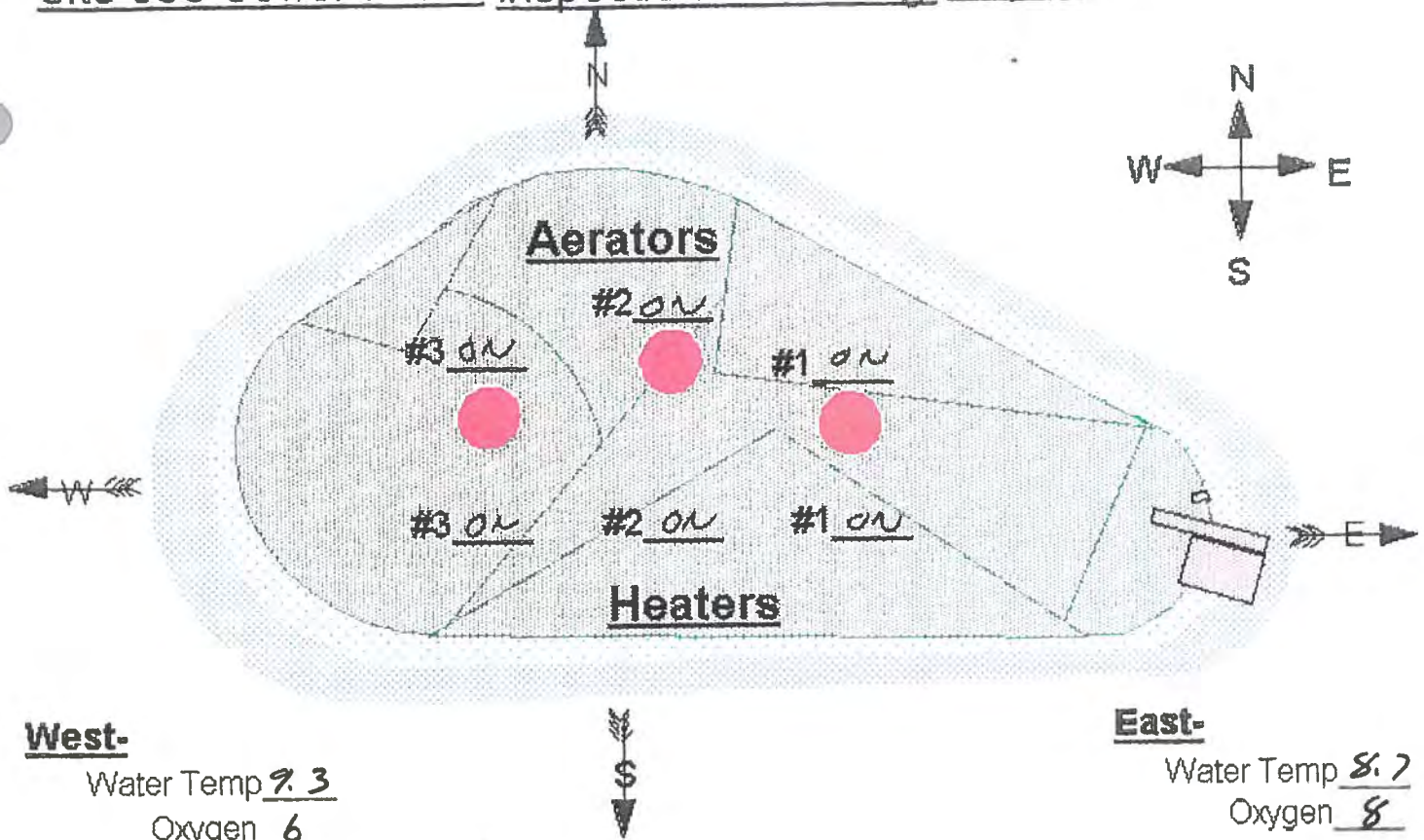
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# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 9.3  
Oxygen 6  
pH 9.30  
Time 0600

## East-

Water Temp 8.7  
Oxygen 8  
pH 9.31  
Time 0630

## COLOR----

Green ☒  
Green Brown \_\_\_\_\_  
Brown Green \_\_\_\_\_  
Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## ODOR----1 SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Inspected by Dave Anderson

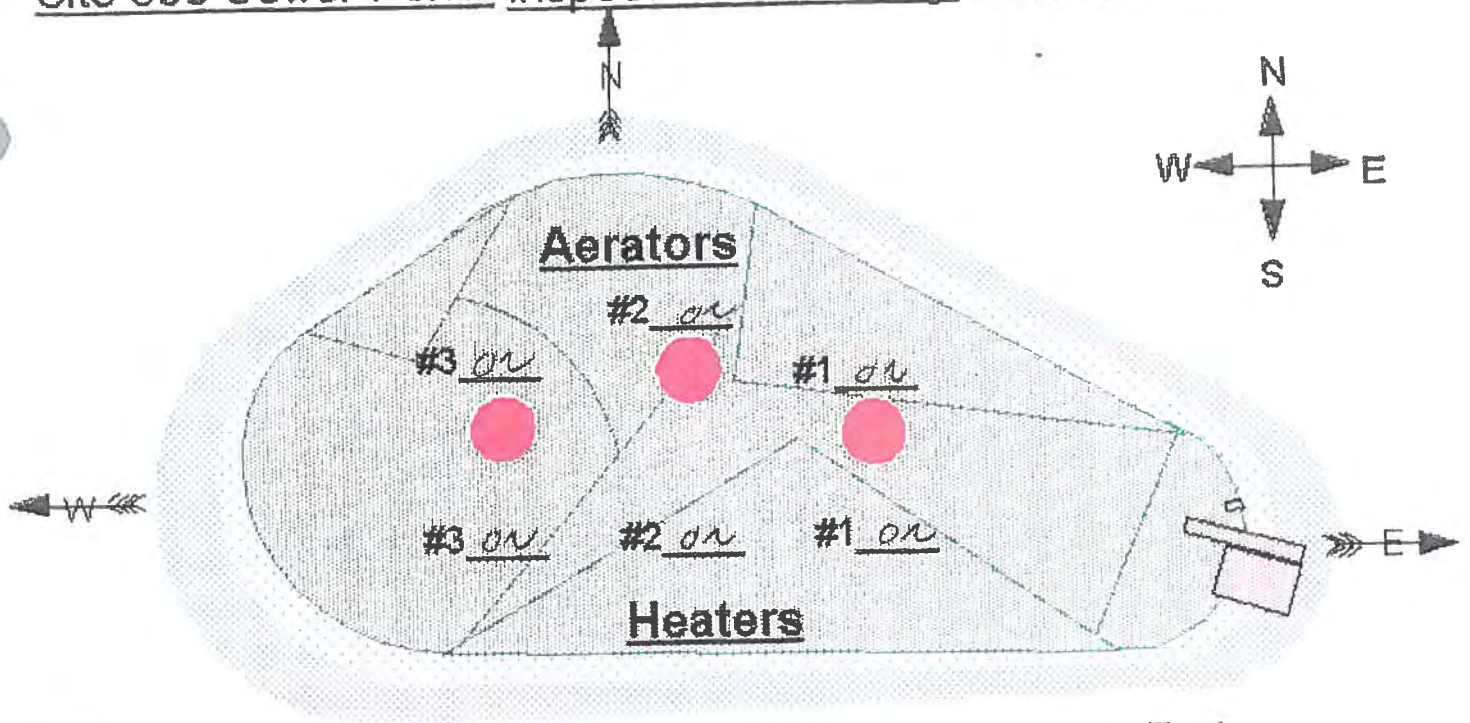
11-19-12  
Date

Supervisor Review Dave Anderson

11-19-12  
Date

Comments \_\_\_\_\_

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 9.1  
Oxygen 8  
pH 9.37  
Time 0600

## East-

Water Temp 8.3  
Oxygen 8  
pH 9.39  
Time 0630

## COLOR----

Water Level 2"  
Water Meter-Stop 7794455  
Water Meter-Start 7754455

Green ☒  
Green Brown ☐  
Brown Green ☐  
Brown ☐

Common Bacterium-Per Drop ☐  
Activated Sludge ☐  
Glass Tube Test ☒

Water Added 0

Air Temp. 2.8

Wind Direction NONE

## ODOR----

Erosion SOME  
Animal Burrows SOME  
Weed Control SOME

## Percolation Pond

Water Level-NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Dan Andrews  
Inspected by

11-15-12  
Date

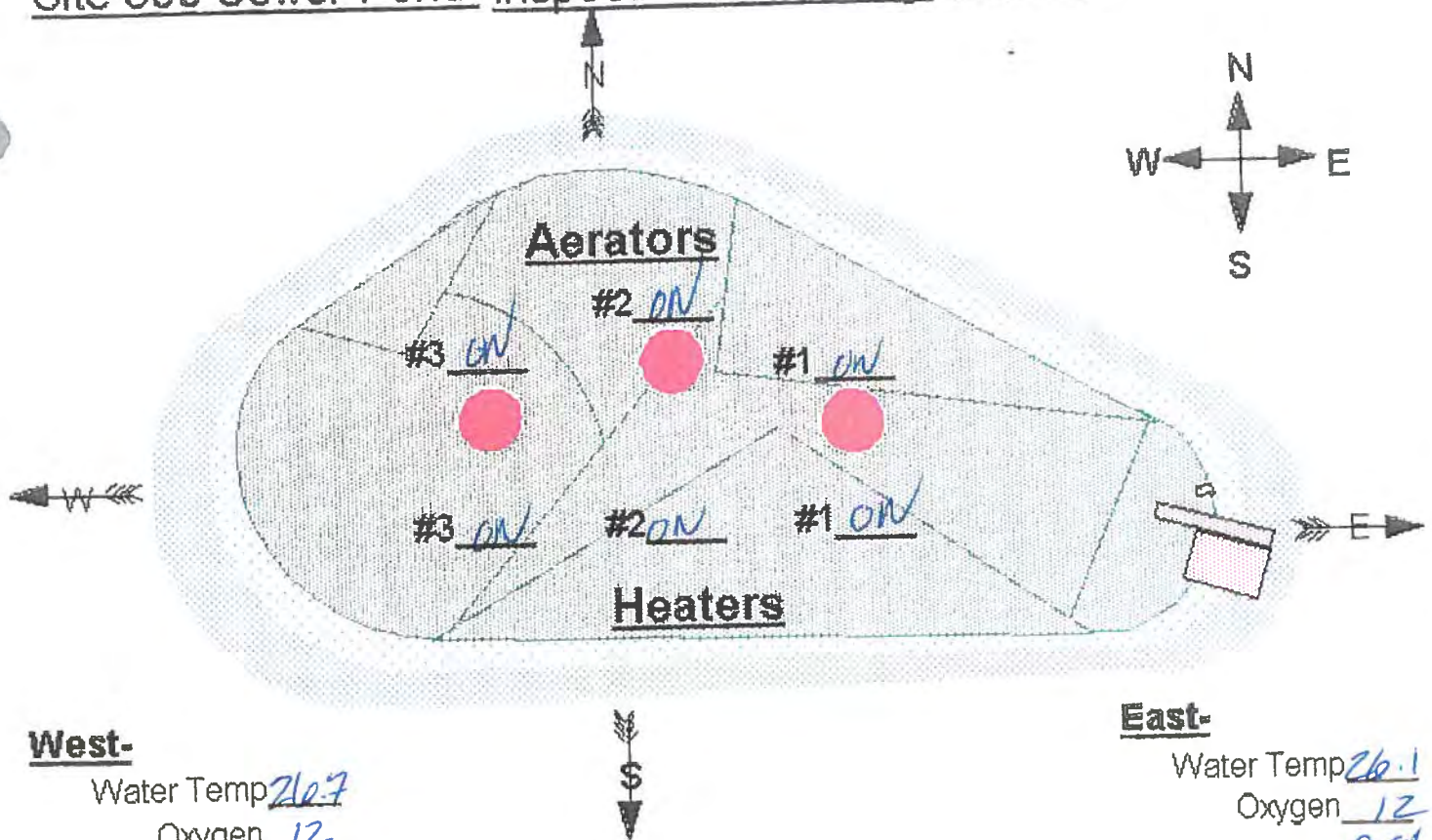
Dan Andrews  
Supervisor Review

11-15-12  
Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 21.7  
Oxygen 12  
pH 8.92  
Time 1300

## East-

Water Temp 26.1  
Oxygen 12  
pH 8.84  
Time 1300

## COLOR----

Water Level +3 1/2"  
Water Meter-Stop 7794455  
Water Meter-Start 7794455  
Water Added ✓  
Air Temp 19.1  
Wind Direction E to W

Common Bacterium-Per Drop \_\_\_\_\_  
Activated Sludge \_\_\_\_\_  
Glass Tube Test ✓

## ODOR----

Erosion some  
Animal Burrows some  
Weed Control some

## Percolation Pond

Water Level not flowing  
Erosion some  
Animal Burrows some  
Weed Control some

Inspected by [Signature]

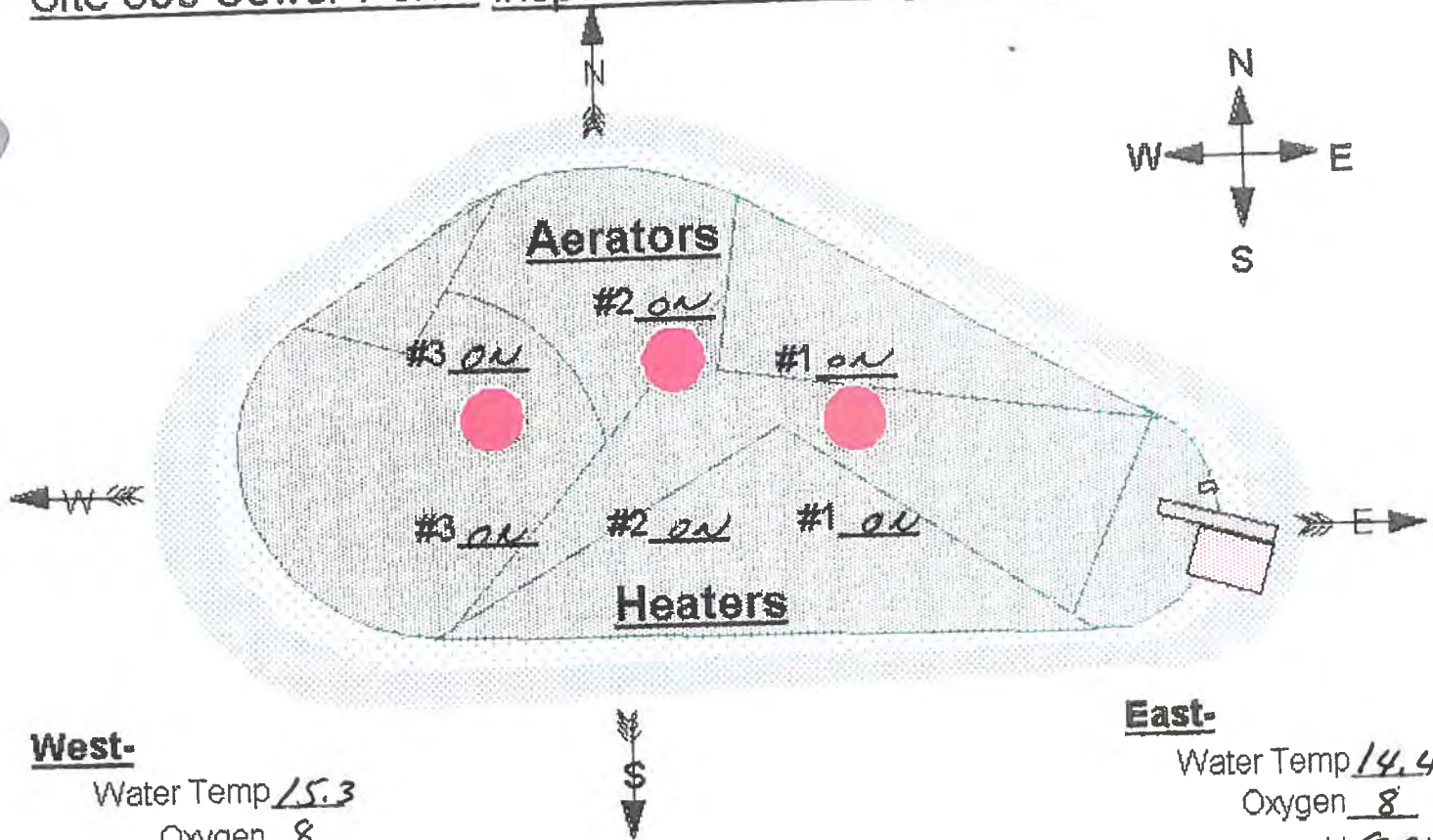
11-12-12  
Date

Supervisor Review [Signature]

11-12-12  
Date

Comments \_\_\_\_\_

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 15.3  
Oxygen 8  
pH 8.84  
Time 0600

## East-

Water Temp 14.4  
Oxygen 8  
pH 8.81  
Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Water Level +3 1/4"

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp 11.1

Wind Direction NONE

## ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

[Signature]  
Inspected by

11-8-12  
Date

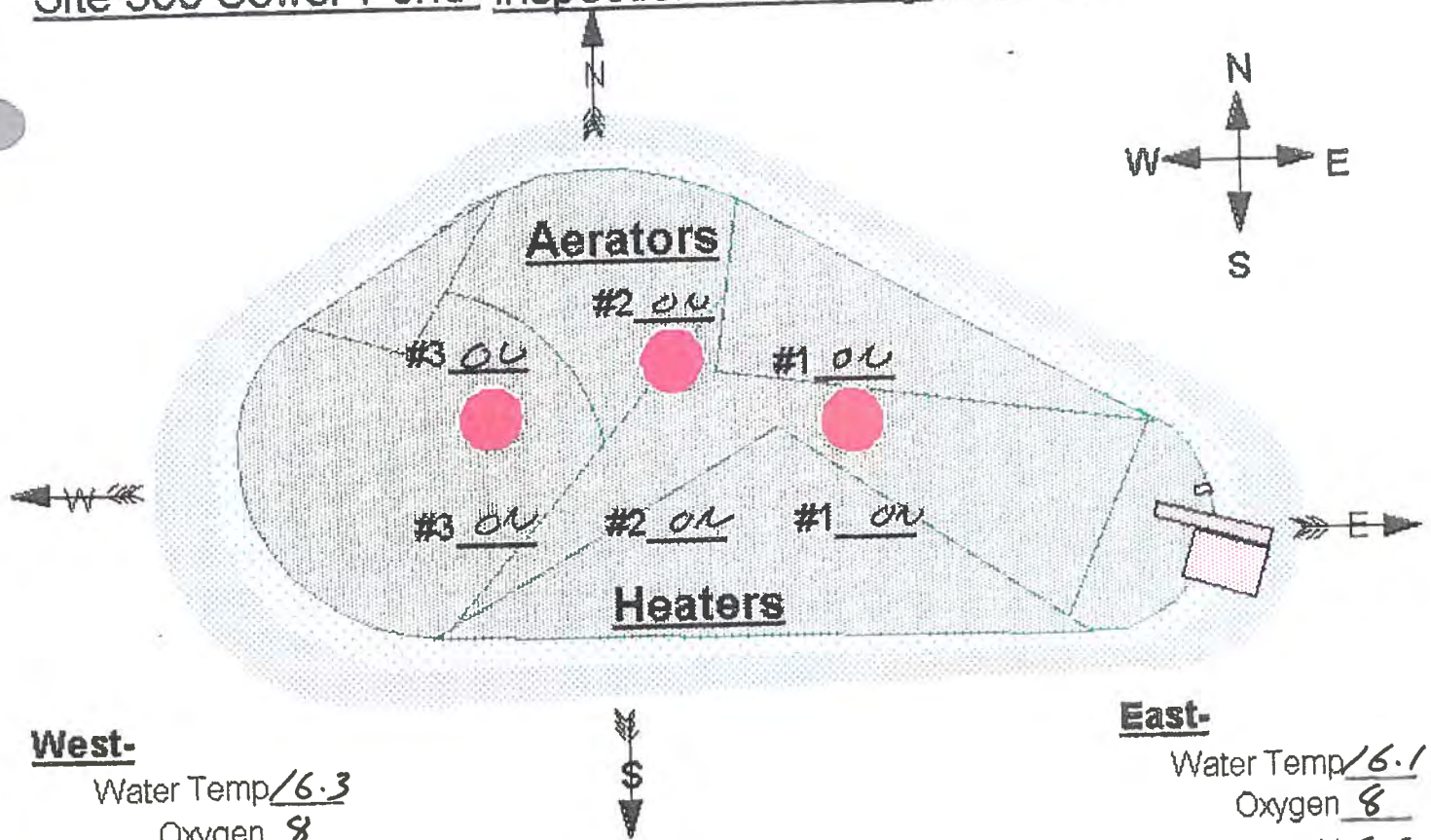
[Signature]  
Supervisor Review

11-8-12  
Date

## Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 6.3  
 Oxygen 8  
 pH 8.79  
 Time 0600

## East-

Water Temp 6.1  
 Oxygen 8  
 pH 8.82  
 Time 0630

## COLOR----

Green ☒  
 Green Brown \_\_\_\_\_  
 Brown Green \_\_\_\_\_  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_  
 Activated Sludge \_\_\_\_\_  
 Glass Tube Test ☒

Water Level +1 1/2"  
 Water Meter-Stop 7794455  
 Water Meter-Start 7794455

Erosion SOME

Water Added 0

Air Temp 13.3

Wind Direction W-E

## ODOR----SLIGHT

Animal Burrows SOME

Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Dan Jensen  
 Inspected by

11-1-12  
 Date

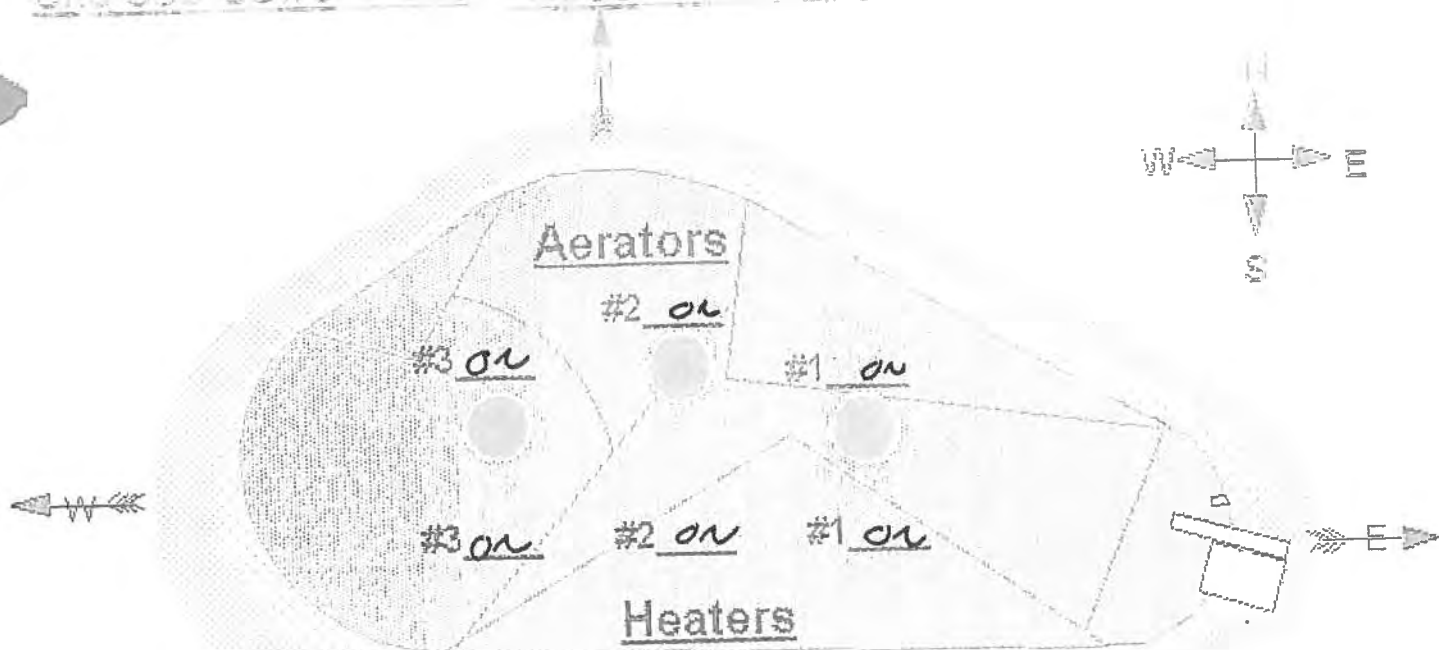
Dave Anderson  
 Supervisor Review

11-1-12  
 Date

## Comments

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# Site 300 Sewer Pond Inspection/Monitoring Report



## West-

Water Temp 16.7  
 Oxygen 8  
 pH 8.94  
 Time 0600

## East-

Water Temp 16.1  
 Oxygen 8  
 pH 8.94  
 Time 0630



## COLOR----

Green ☒  
 Green Brown \_\_\_\_\_  
 Brown Green \_\_\_\_\_  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Water Level +1 1/4"

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp. 11.1

Wind Direction W-E

ODOR---- SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

[Signature]  
 Inspector

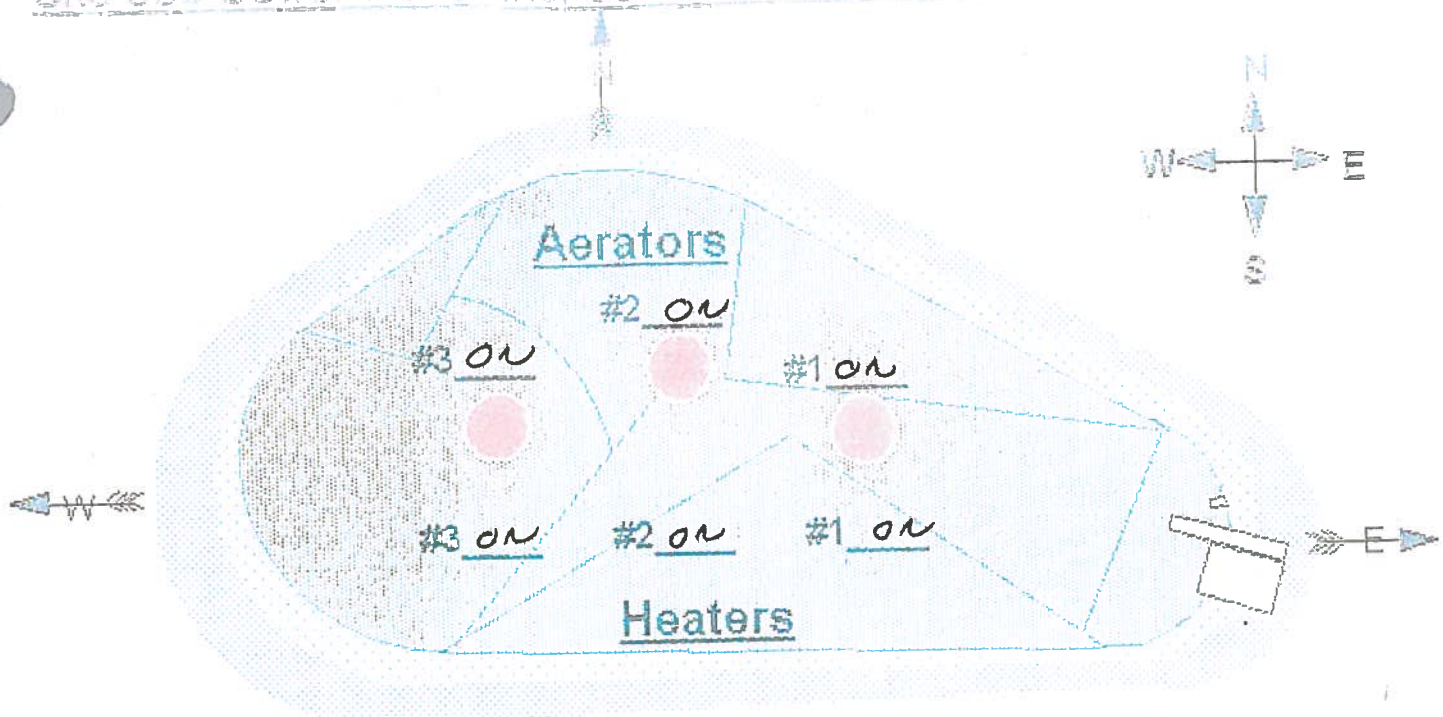
10-25-12  
 Date

[Signature]  
 Supervisor Review

10-25-12  
 Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 17.1  
 Oxygen 8  
 pH 9.02  
 Time 0630

## East-

Water Temp 16.6  
 Oxygen 8  
 pH 9.11  
 Time 0700

Water Level +13 1/4"  
 Water Meter-Stop 7794455  
 Water Meter-Start 7794453

## COLOR----

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Water Added 0

Air Temp. 15.0

Wind Direction NOVC

## ODOR---- SLIGHT

Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Dwight  
 Inspector

10-18-12  
 Date

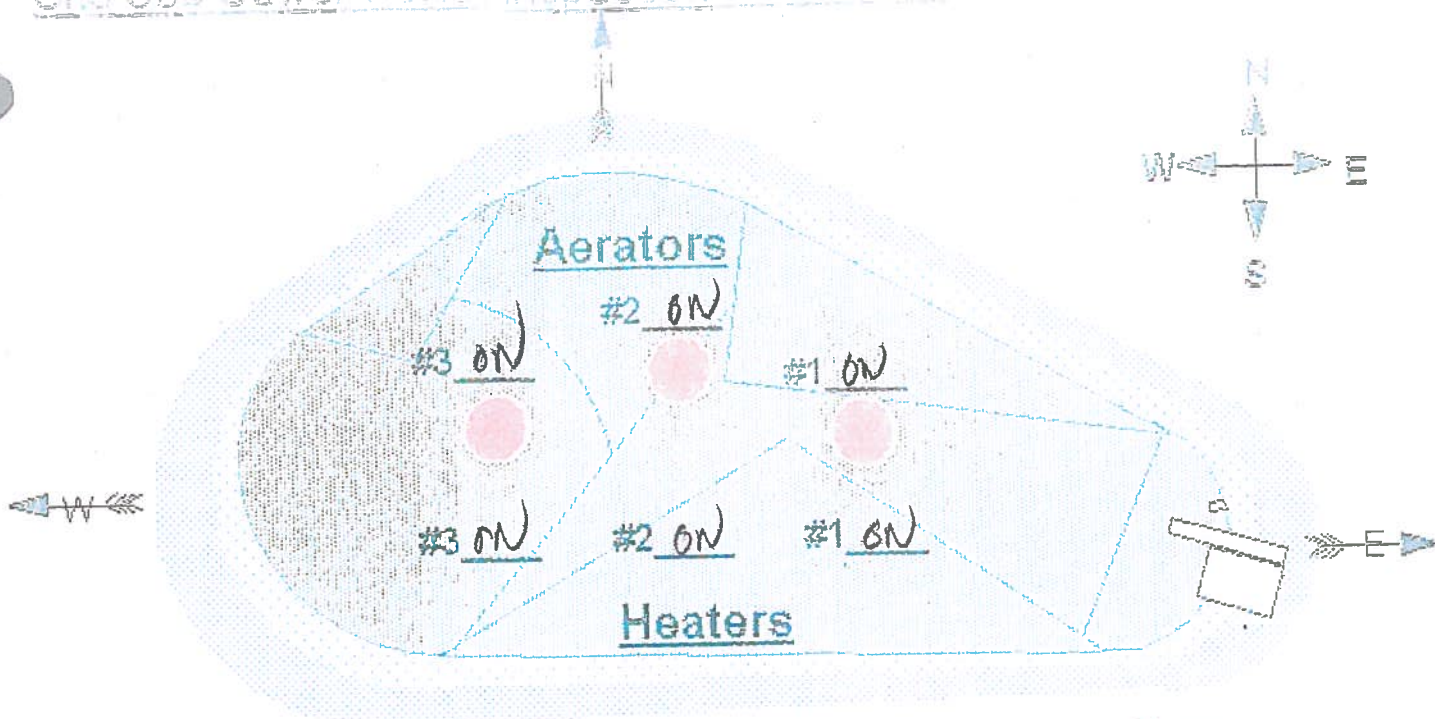
Dave Andrews  
 Supervisor Review

10-18-12  
 Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 25.6  
 Oxygen 12  
 pH 9.60  
 Time 1300

Water Level +2 1/4"

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp. 29.4

Wind Direction E to W

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

ODOR---- slight

## East-

Water Temp 27.2  
 Oxygen 12  
 pH 9.52  
 Time 1300

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion some

Animal Burrows some

Weed Control some

## Percolation Pond

Water Level- Not flowing

Erosion some

Animal Burrows some

Weed Control some

Dave Amos  
 Inspected by

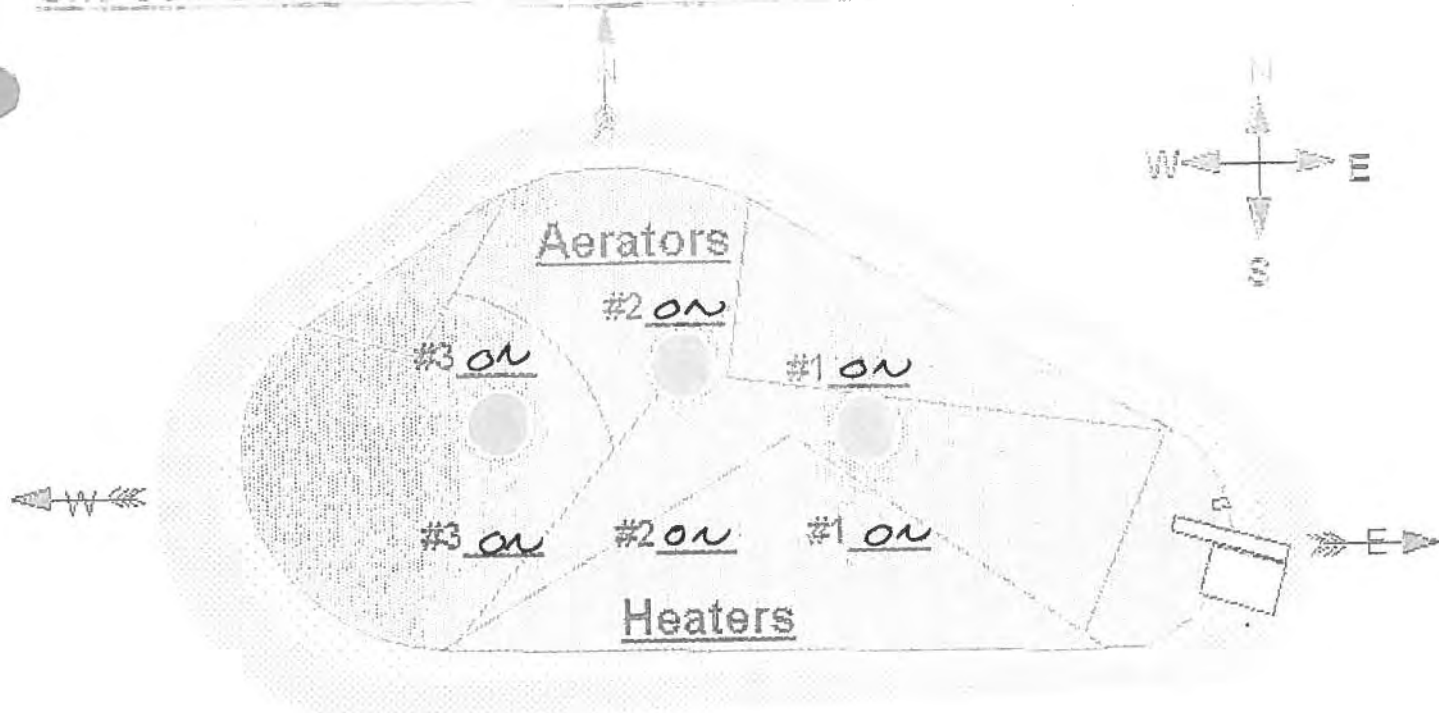
10-16-12  
 Date

Dave Amos  
 Supervisor Review

10-16-12  
 Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 16.4

Oxygen 8

pH 9.31

Time 0600

Water Level +2 1/2"

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp. 15.0

Wind Direction W-E

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

## ODOR----SLIGHT

## East-

Water Temp 16.1

Oxygen 8

pH 9.20

Time 0630

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Diane  
Inspected by

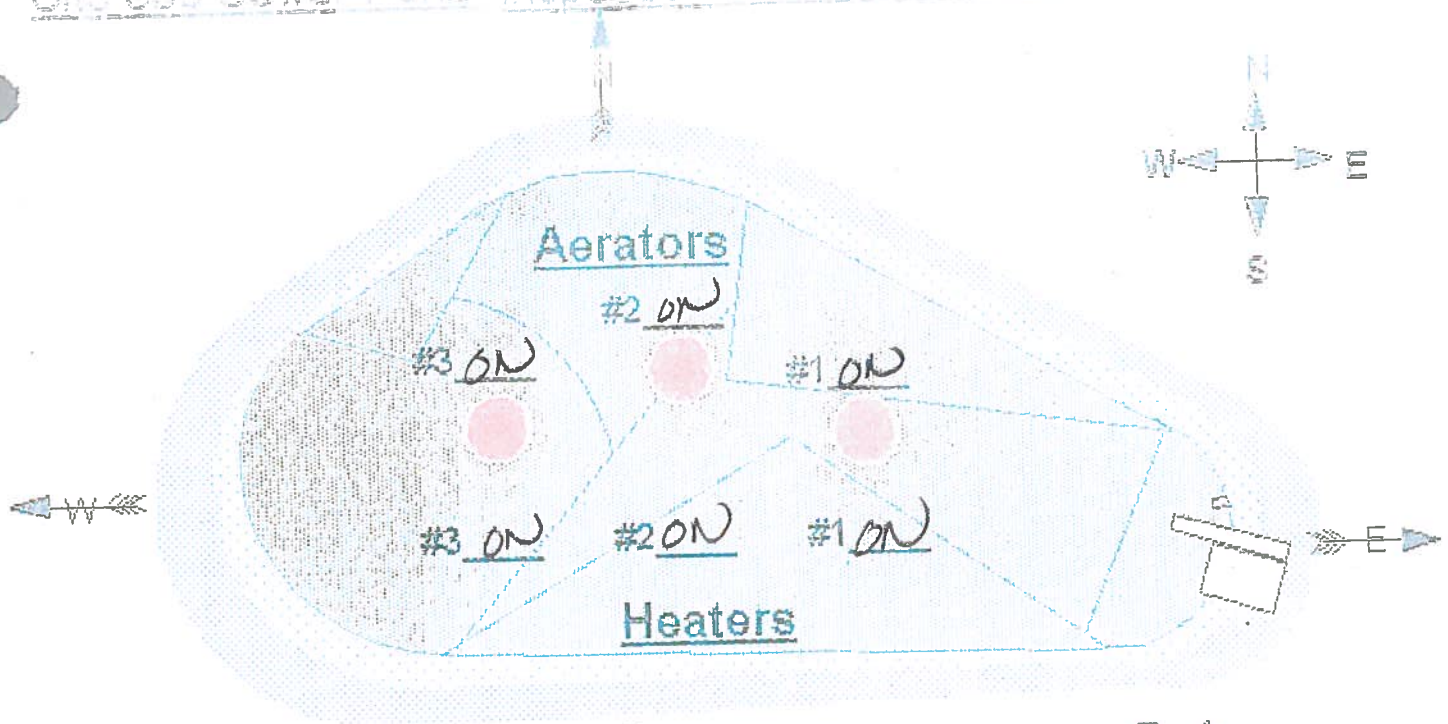
10-11-12  
Date

Dave Annoro  
Supervisor Review

10-16-12  
Date

Comments

# Site 300 Sewer Pond Inspection/Monitoring Report



## West-

Water Temp 24.0  
 Oxygen 12  
 pH 9.42  
 Time 1400

## East-

Water Temp 23.9  
 Oxygen 12  
 pH 9.32  
 Time 1400

## COLOR----

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Water Level +2 1/2  
 Water Meter-Stop 7794455  
 Water Meter-Start 7794455

Erosion 50ml

Water Added ☒  
 Air Temp. 22.2

Animal Burrows 50ml

Wind Direction E to W

ODOR---- slight

Weed Control 50ml

## Percolation Pond

Water Level- Not flowing

Erosion 50ml

Animal Burrows 50ml

Weed Control 50ml

Dave Anderson  
 Inspected by

10-8-12  
 Date

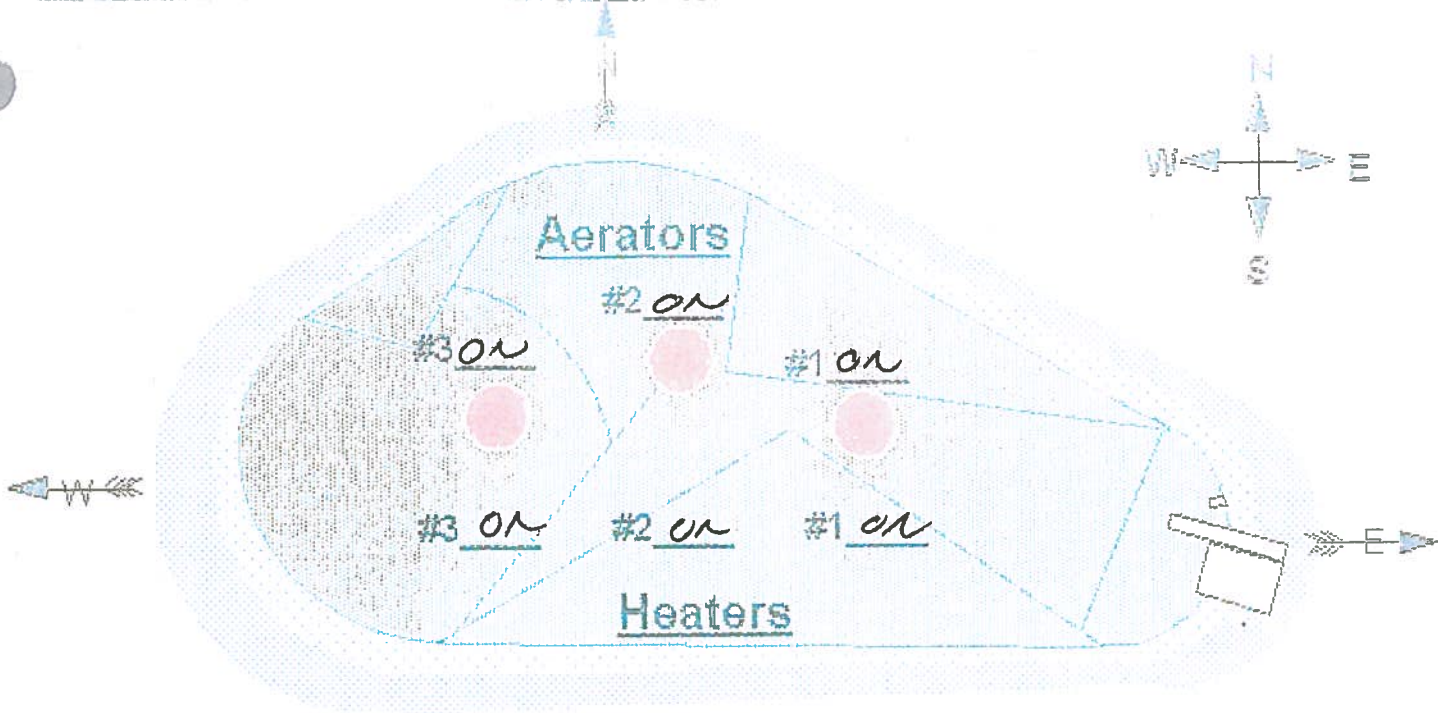
Dave Anderson  
 Supervisor Review

11-8-12  
 Date

Comments



# Site 300 Sewer Pond Inspection/Monitoring Report



## West-

Water Temp 20.5  
 Oxygen 5  
 pH 9.28  
 Time 0600

## East-

Water Temp 19.6  
 Oxygen 6  
 pH 9.30  
 Time 0630

## COLOR----

Green ☒  
 Green Brown \_\_\_\_\_  
 Brown Green \_\_\_\_\_  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_  
 Activated Sludge \_\_\_\_\_  
 Glass Tube Test ☒

Water Level +3 1/2"  
 Water Meter-Stop 7794455  
 Water Meter-Start 7794455

Erosion SOME

Water Added 0

Animal Burrows SOME

Air Temp. 21.1

## ODOR----SLIGHT

Wind Direction NONE

Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Deane Lander  
 Inspector by

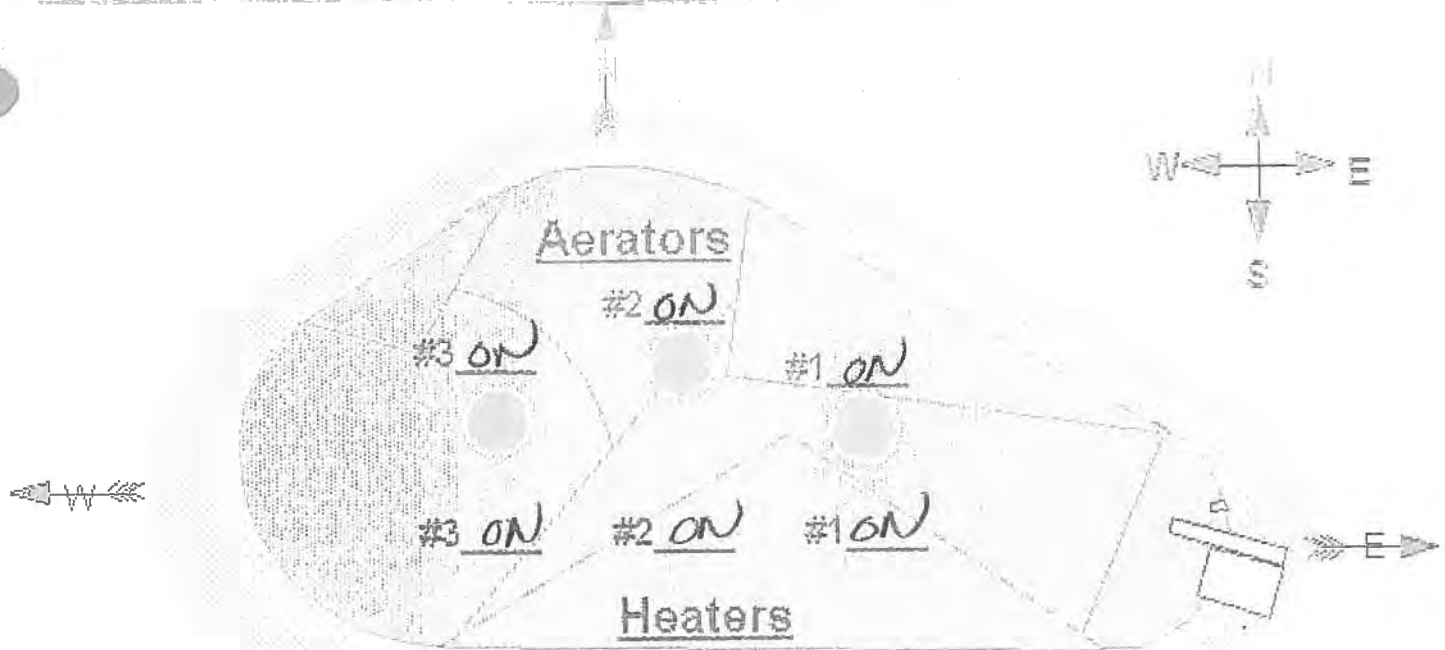
10-4-12  
 Date

Dave Anderson  
 Supervisor Review

10-4-12  
 Date

Comments \_\_\_\_\_

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 26.4  
 Oxygen 12  
 pH 9.58  
 Time 1300

## East-

Water Temp 26.4  
 Oxygen 12  
 pH 9.42  
 Time 1300

## COLOR----

Green ☒  
 Green Brown \_\_\_\_\_  
 Brown Green \_\_\_\_\_  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion some

Animal Burrows some

Weed Control some

ODOR---- slight

## Percolation Pond

Water Level- Not flowing

Erosion some

Animal Burrows some

Weed Control some

Dave Annors  
 Inspected by

10-1-12  
 Date

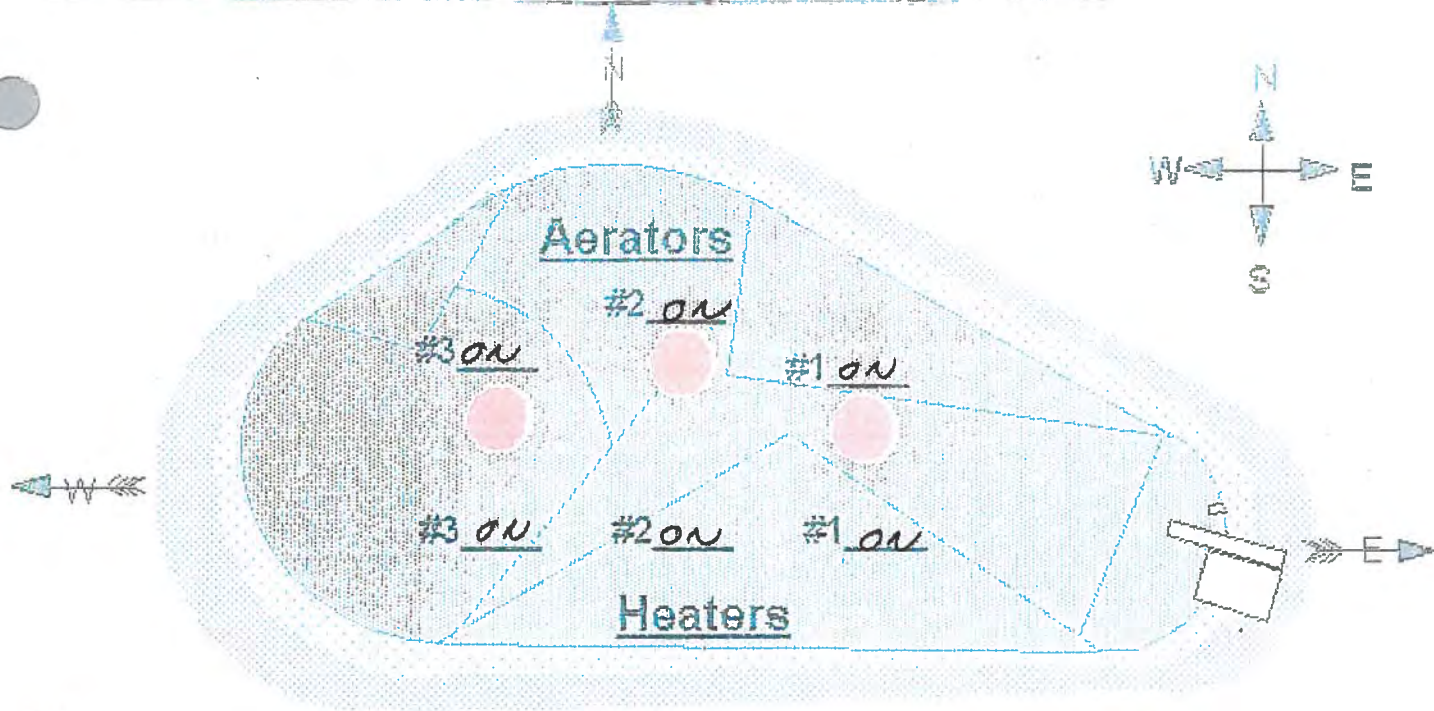
Dave Annors  
 Supervisor Review

10-1-12  
 Date

Comments



# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 19.5

Oxygen 3

pH 9.42

Time 0600

## East-

Water Temp 19.2

Oxygen 3

pH 9.46

Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion some

Animal Burrows some

Weed Control some

## ODOR----| SLIGHT

## Percolation Pond

Water Level- NOT Flowing

Erosion some

Animal Burrows some

Weed Control some

Duranfer  
inspected by

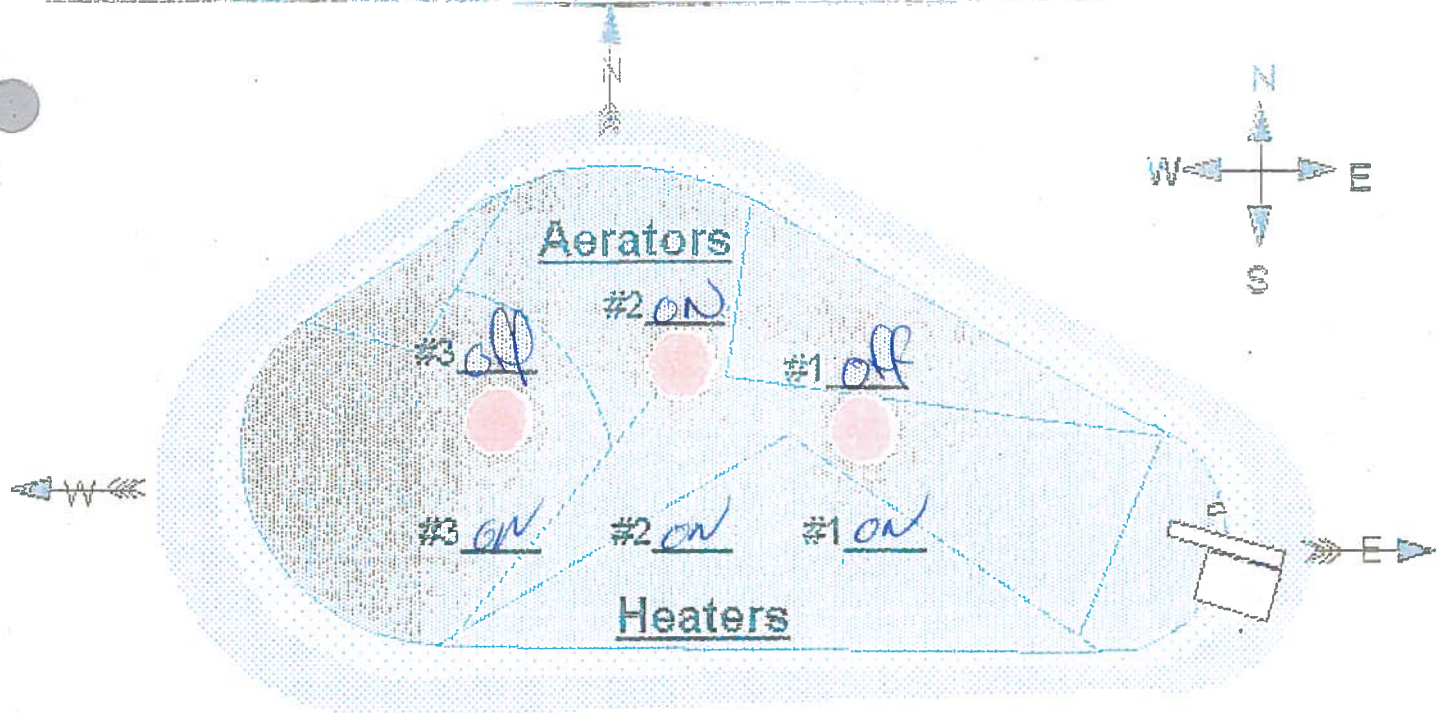
Dan Anderson  
Supervisor Review

9-27-12  
Date

9-27-12  
Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 26.2  
 Oxygen 12  
 pH 9.98  
 Time 1300



## East-

Water Temp 26.8  
 Oxygen 12  
 pH 9.02  
 Time 1300

## COLOR----

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Water Level +5 1/2  
 Water Meter-Stop 7794455  
 Water Meter-Start 7794455

Water Added 0  
 Air Temp. 26.00  
 Wind Direction None

## ODOR----/ None

Erosion none  
 Animal Burrows none  
 Weed Control none

## Percolation Pond

Water Level- not flowing  
 Erosion none  
 Animal Burrows none  
 Weed Control none

Dan Andrews  
 Inspected by

9-24-12  
 Date

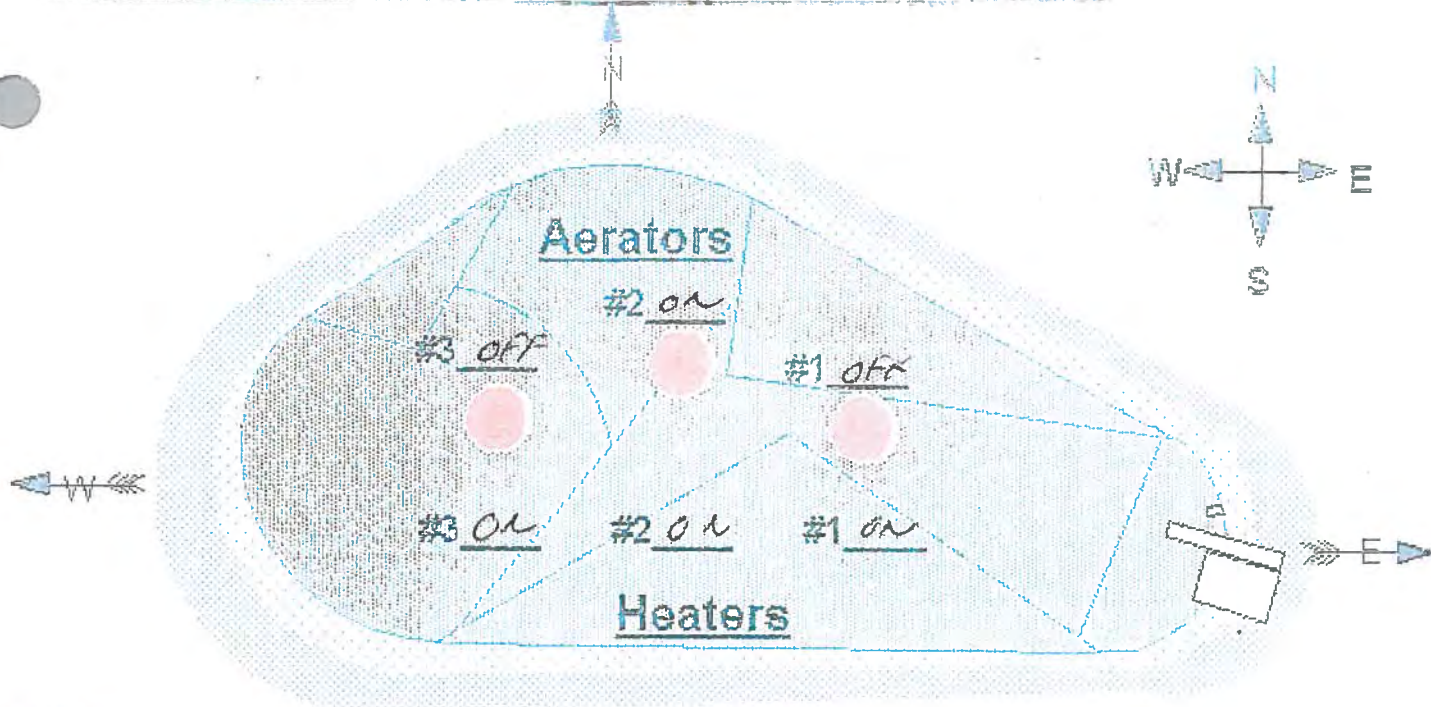
Dan Andrews  
 Supervisor Review

9-24-12  
 Date

## Comments



# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 18.5  
Oxygen 3  
pH 9.42  
Time 0600



## East-

Water Temp 18.1  
Oxygen 3  
pH 9.40  
Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion Some

Animal Burrows Some

Weed Control some

Water Level 7 5 1/2"

Water Meter-Stop 7794455

Water Meter-Start 7794455

Water Added 0

Air Temp. 15.6

Wind Direction none

## ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion Some

Animal Burrows Some

Weed Control Some

Duong Lam  
Inspected by

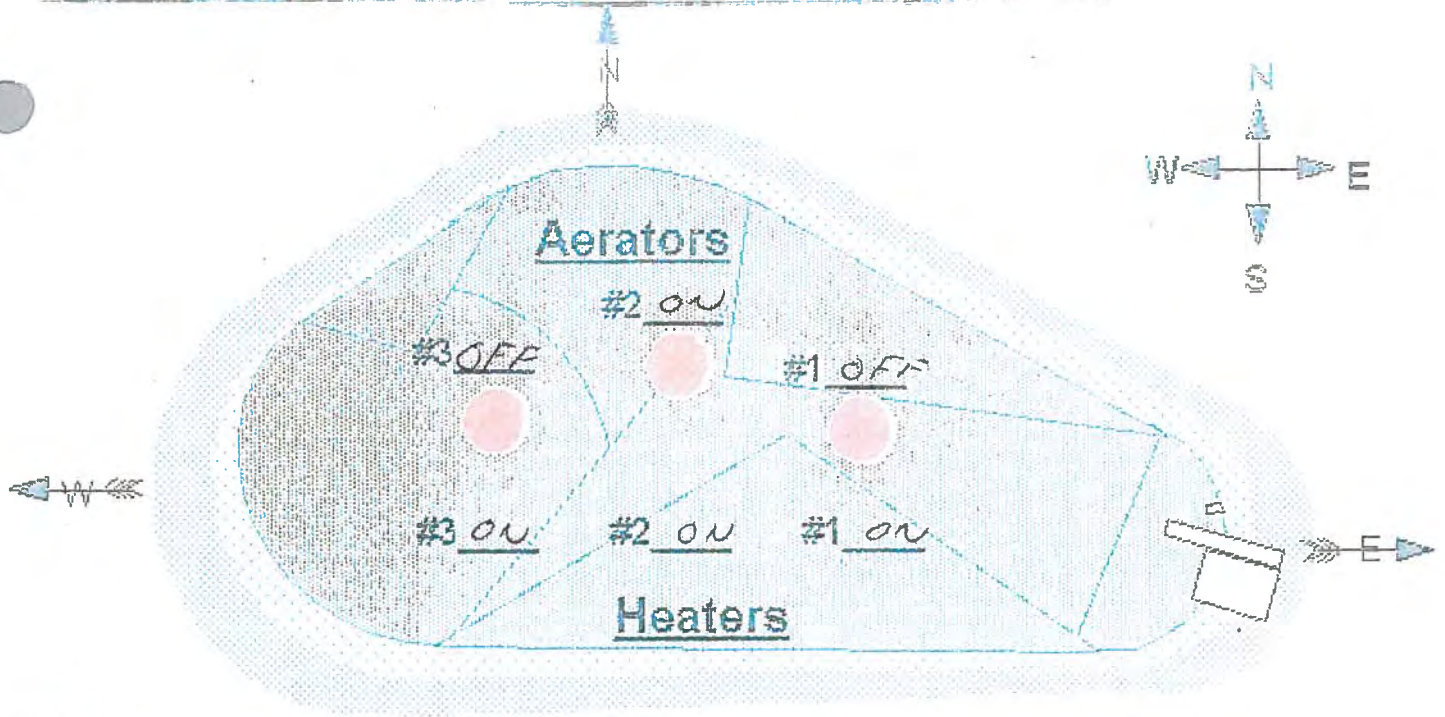
Dan Anderson  
Supervisor Review

9-20-12  
Date

9-20-12  
Date

Comments

# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 21.2  
 Oxygen 3  
 pH 9.37  
 Time 0600

## East-

Water Temp 21.4  
 Oxygen 3  
 pH 9.40  
 Time 0630

## COLOR----

Green ☒  
 Green Brown \_\_\_\_\_  
 Brown Green \_\_\_\_\_  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_  
 Activated Sludge \_\_\_\_\_  
 Glass Tube Test ☒

## ODOR----SLIGHT

Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

## Percolation Pond

Water Level- +6.75"  
 Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

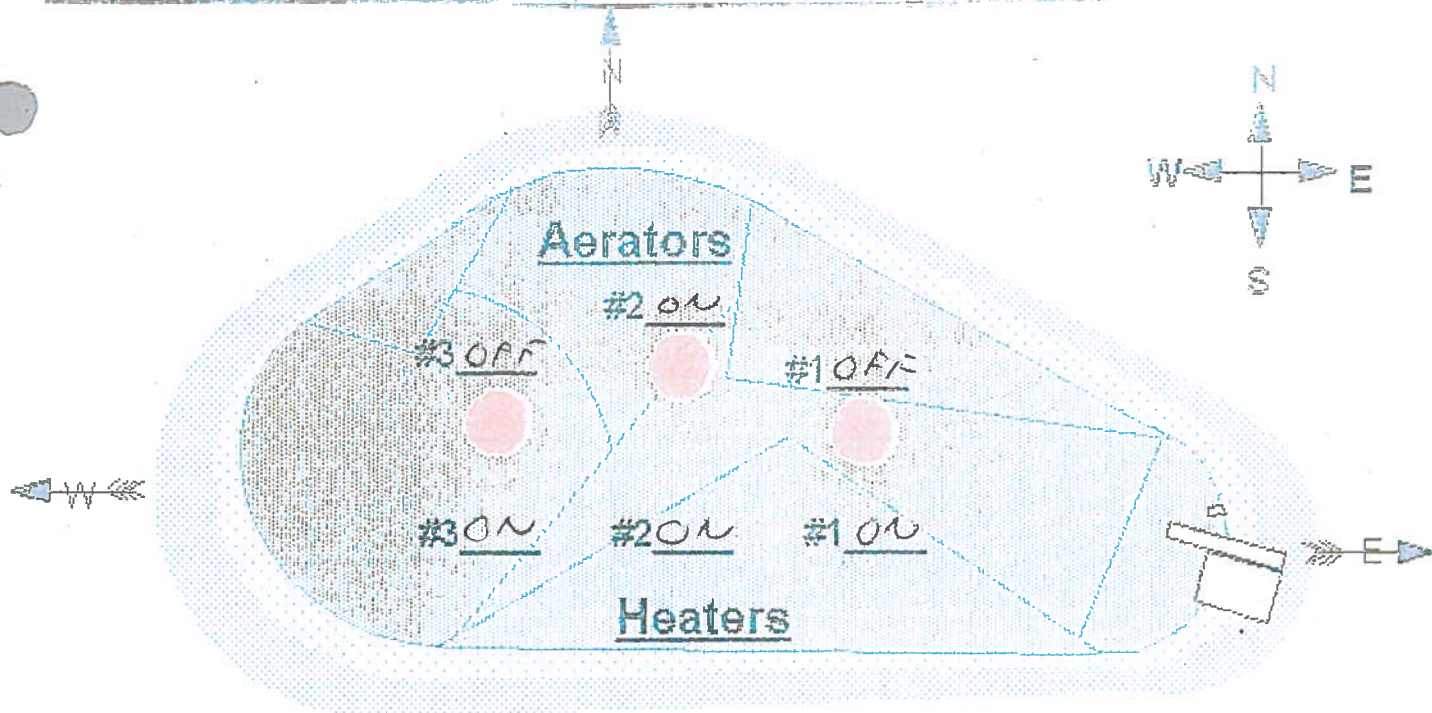
Diane Lind  
 Inspected by  
Dave Anderson  
 Supervisor Review

9-13-12  
 Date  
9-17-12  
 Date

## Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 20.3

Oxygen 3

pH 9.47

Time 0600

Water Level + 2"

Water Meter-Stop 7751363

Water Meter-Start 7691146

Water Added 60,217

Air Temp. 18.9

Wind Direction W-E

## East-

Water Temp 20.2

Oxygen 3

pH 9.49

Time 0630

Common Bacterium-Per Drop     

Activated Sludge     

Glass Tube Test ✓

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## COLOR----

Green ✓

Green Brown     

Brown Green     

Brown     

## ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Diana Ford  
Inspected by

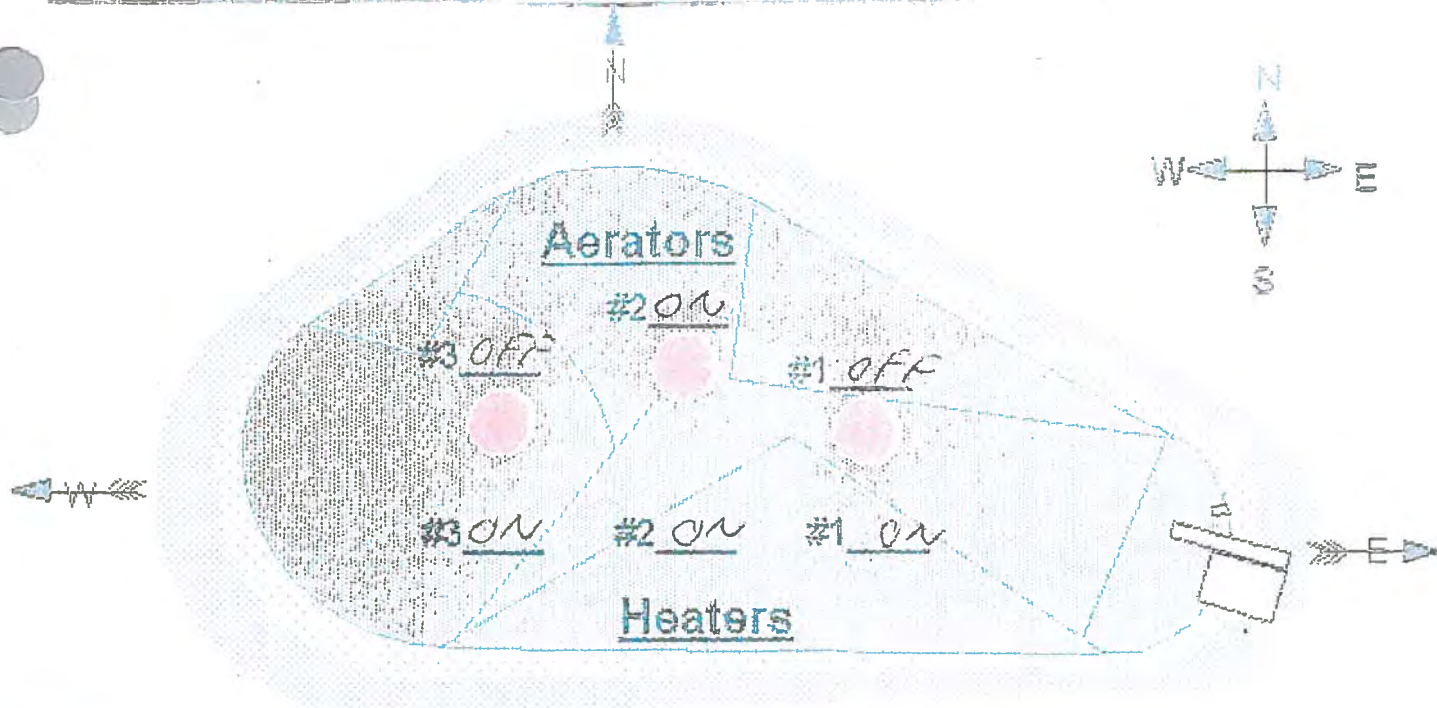
9-6-12  
Date

Don Anderson  
Supervisor Review

9-17-12  
Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 20.4  
 Oxygen 3  
 pH 9.28  
 Time 0600

## East-

Water Temp 20.5  
 Oxygen 3  
 pH 9.40  
 Time 0630

## COLOR----

Water Level + 6"  
 Water Meter-Stop 7651146  
 Water Meter-Start 7634424  
 Water Added 58.722  
 Air Temp. 18.3  
 Wind Direction NW

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

## ODOR----1 SLIGHT

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING  
 Erosion SOME  
 Animal Burrows SOME  
 Weed Control SOME

Dean Ford  
 Inspection by

8-30-12  
 Date

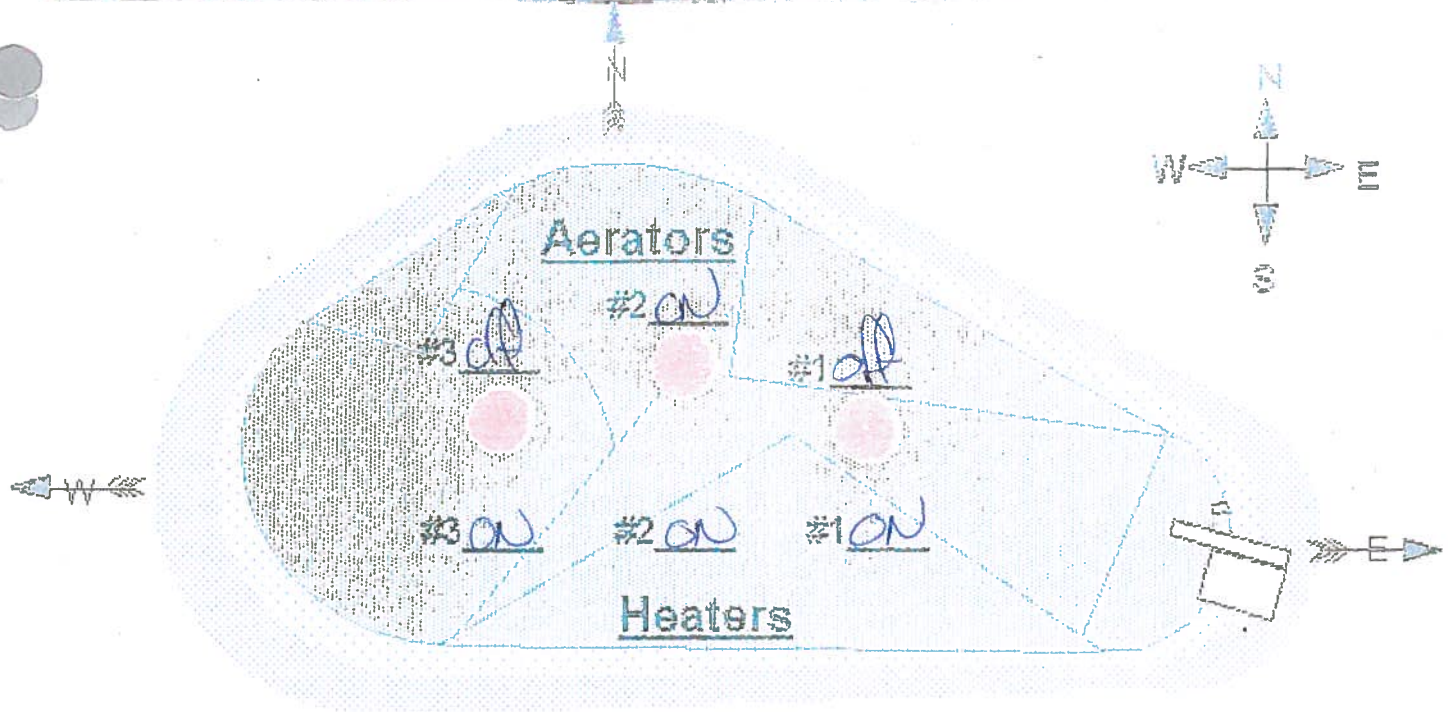
Paul Huxford  
 Supervisor Review

8-30-12  
 Date

## Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 26.7  
 Oxygen 12  
 pH 9.42  
 Time 1300

## East-

Water Temp 27.2  
 Oxygen 12  
 pH 9.48  
 Time 1300

## COLOR----

Water Level +4  
 Water Meter-Stop 7611658  
 Water Meter-Start 7583363  
 Water Added 28295  
 Air Temp. 30.0  
 Wind Direction E+W

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

## ODOR----/ None

Erosion some  
 Animal Burrows some  
 Weed Control some

## Percolation Pond

Water Level- not flowing  
 Erosion some  
 Animal Burrows some  
 Weed Control some

[Signature]  
 Inspector

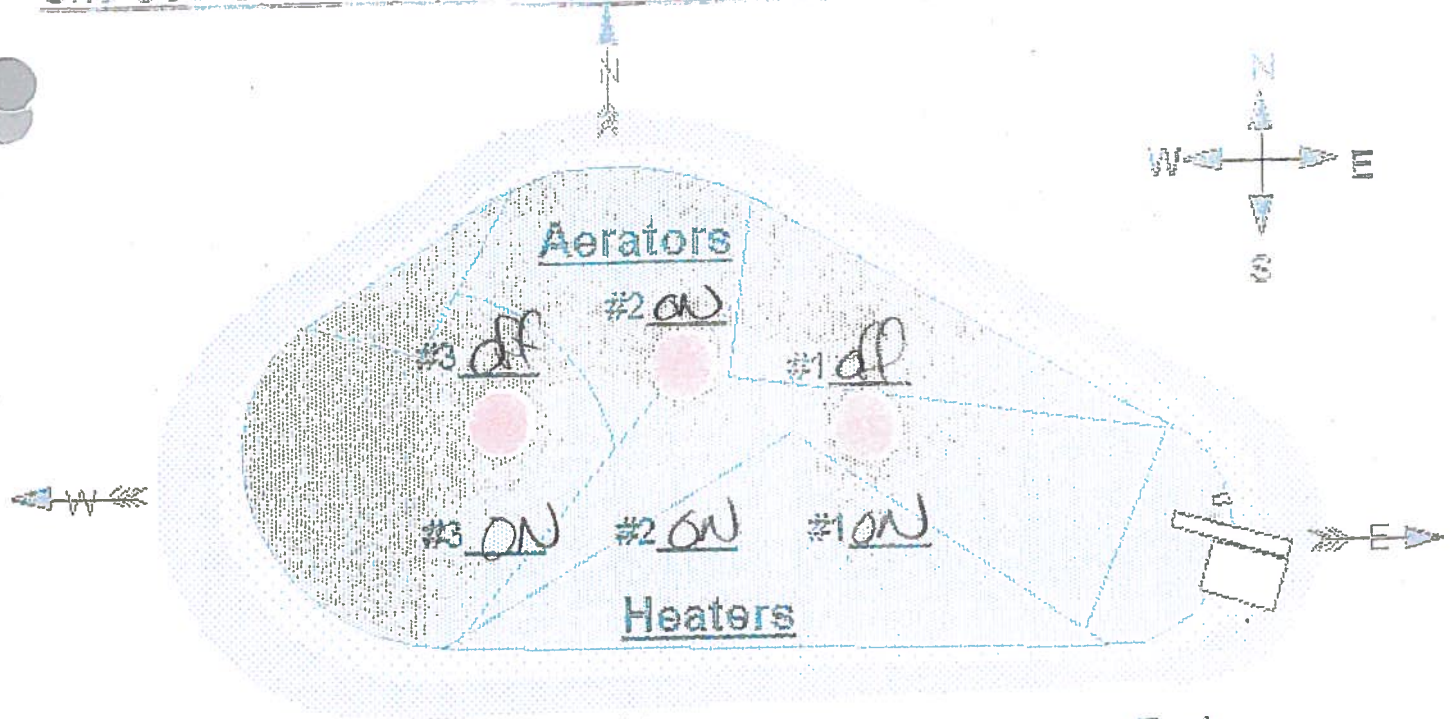
8-20-12  
 Date

[Signature]  
 Supervisor Review

8-20-12  
 Date

Comments Water Added over 4  
day weekend.

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 36.3  
 Oxygen 12  
 pH 9.97  
 Time 1300

## East-

Water Temp 31.0  
 Oxygen 12  
 pH 9.87  
 Time 1300



## COLOR----

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Water Level +4  
 Water Meter-Stop 7583363  
 Water Meter-Start 7574032

Water Added 9331  
 Air Temp 37.8°  
 Wind Direction None

## ODOR---- None

Erosion Some  
 Animal Burrows Some  
 Weed Control Some

## Percolation Pond

Water Level- not flowing  
 Erosion Some  
 Animal Burrows Some  
 Weed Control Some

Dave Amaro  
 Inspected by  
Dan Amaro  
 Supervisor Review

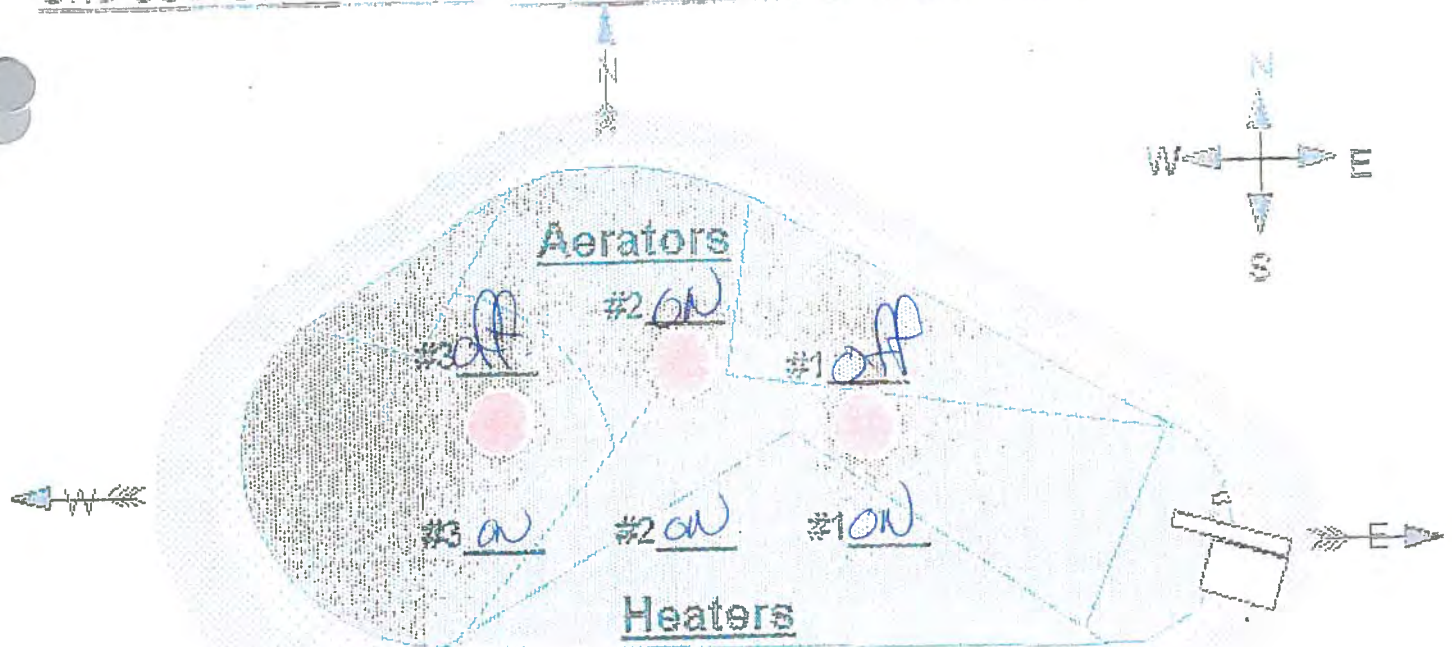
8-16-12  
 Date  
8-16-12  
 Date

## Comments

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 29.7  
 Oxygen 12  
 pH 8.99  
 Time 1400

## East-

Water Temp 30.2  
 Oxygen 12  
 pH 9.42  
 Time 1400

## COLOR----

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☒  
 Glass Tube Test ☒

Water Level +4  
 Water Meter-Stop 7554891  
 Water Meter-Start 7518818

Water Added 36,073  
 Air Temp 40.8  
 Wind Direction E to W.

## ODOR----

Erosion 50m  
 Animal Burrows 50m  
 Weed Control 50m

## Percolation Pond

Water Level- not flowing  
 Erosion 50m  
 Animal Burrows 50m  
 Weed Control 50m

Dave Amador  
 Inspected by

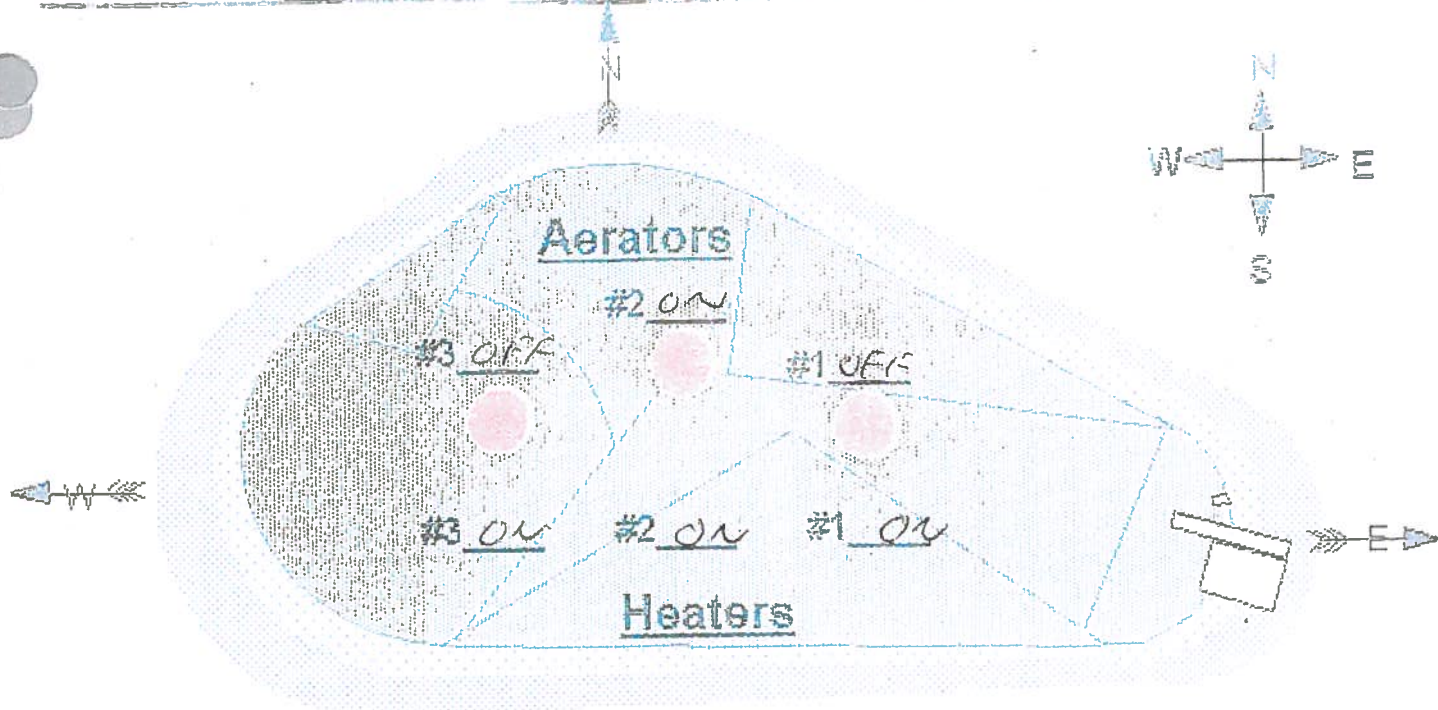
8-13-12  
 Date

Dave Amador  
 Supervisor Review

8-13-12  
 Date

Comments Water ADD over 4  
days weekend,

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 22.3

Oxygen 3

pH 9.40

Time 0600



## East-

Water Temp 22.1

Oxygen 3

pH 9.42

Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Water Level +3 3/4"

Water Meter-Stop 7518818

Water Meter-Start 7496886

Water Added 21,932

Air Temp. 21.7

Wind Direction NONE

ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

[Signature]  
Inspected by

8-9-12  
Date

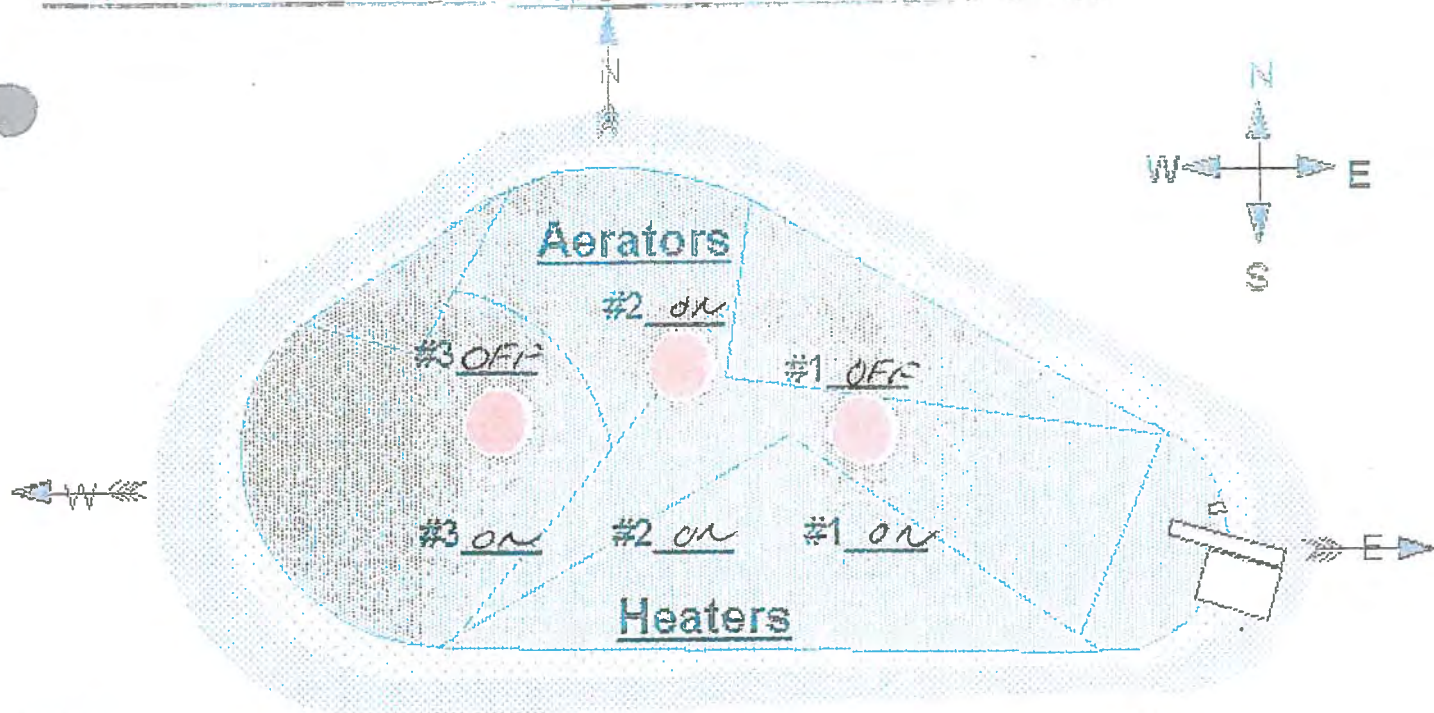
[Signature]  
Supervisor Review

8-9-12  
Date

Comments



# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 30.7

Oxygen 12

pH 9.64

Time 1400

## East-

Water Temp 25.9

Oxygen 12

pH 9.49

Time 1430

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Water Level +3.5"

Water Meter-Stop 7496886

Water Meter-Start 7459844

Water Added 37,042

Air Temp. 35.0

Wind Direction E-W

ODOR----SLIGHT

## Percolation Pond

Water Level-NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Inspected by

8-6-12

Date

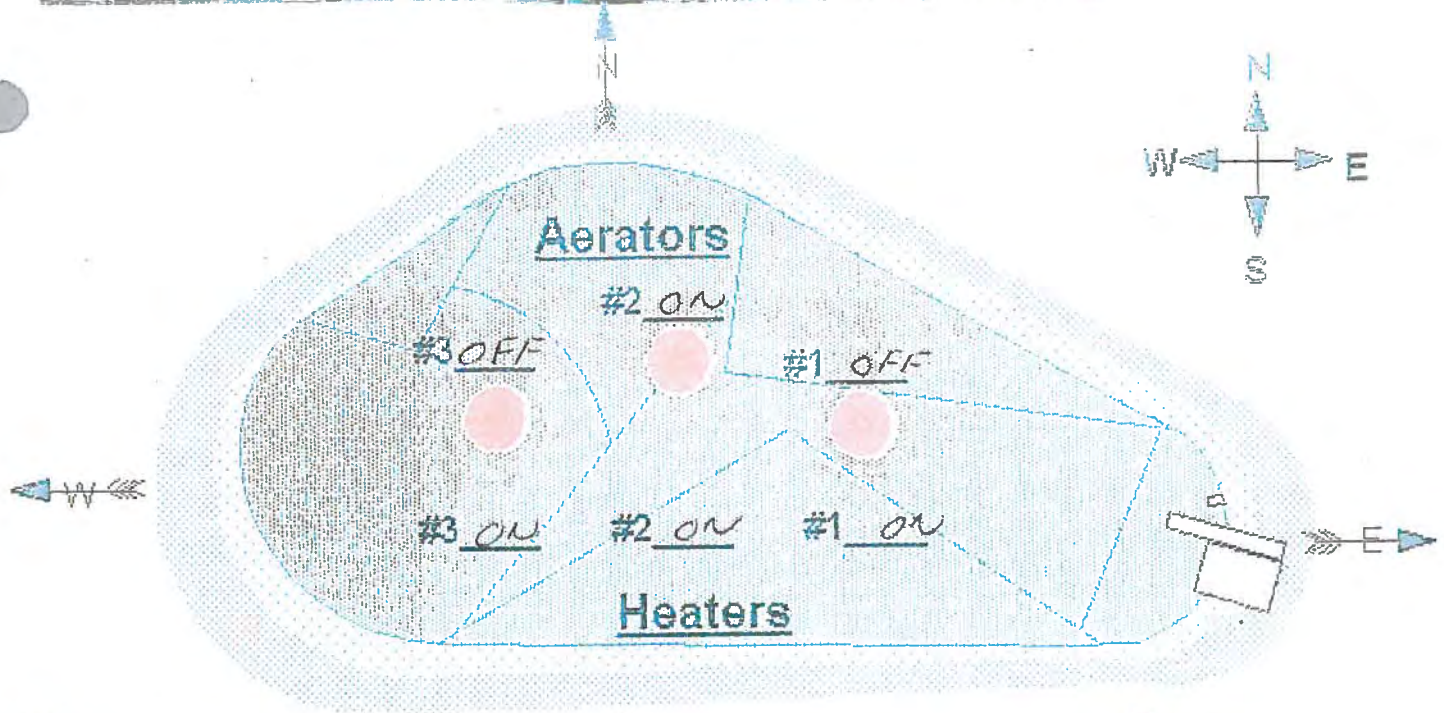
Supervisor Review

8-6-12

Date

Comments

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 22.1  
 Oxygen 3  
 pH 9.53  
 Time 0600

## East-

Water Temp 22.2  
 Oxygen 3  
 pH 9.52  
 Time 0630

Water Level +2"  
 Water Meter-Stop 7459844  
 Water Meter-Start 7437525

## COLOR----

Green ☒  
 Green Brown ☐  
 Brown Green ☐  
 Brown ☐

Common Bacterium-Per Drop ☐  
 Activated Sludge ☐  
 Glass Tube Test ☒

Water Added 22,319

Air Temp. 19.4

Wind Direction NONE

## ODOR----SLIGHT

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Don  
 Inspected by

8-2-12  
 Date

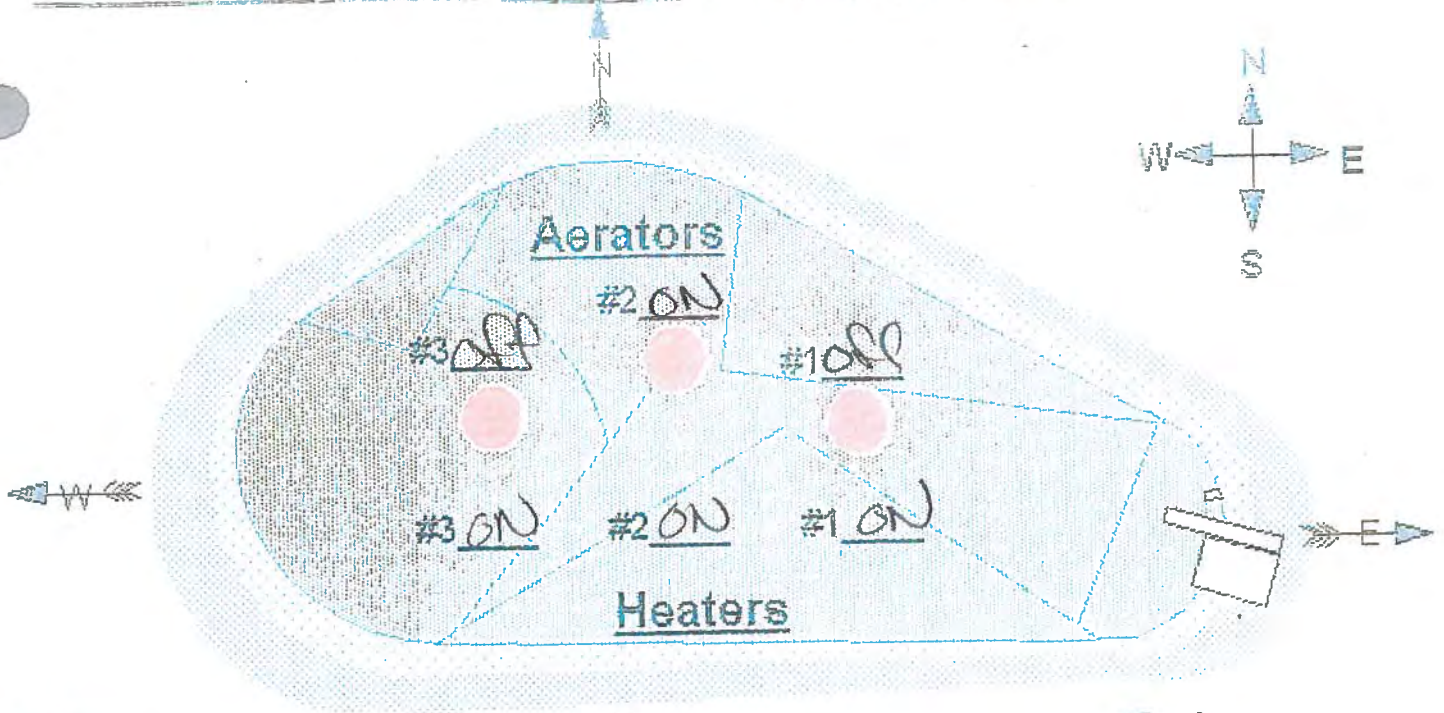
Don Amador  
 Supervisor Review

8-2-12  
 Date

## Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 25.0  
Oxygen 12  
pH 9.57  
Time 1400

## East-

Water Temp 23.9  
Oxygen 12  
pH 9.46  
Time 1400

## COLOR----

Green ☒  
Green Brown ☐  
Brown Green ☐  
Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion Some

Animal Burrows Some

Weed Control Some

## ODOR---- Slight

## Percolation Pond

Water Level- not flowing

Erosion Some

Animal Burrows Some

Weed Control Some

Dave Anderson  
Inspected by

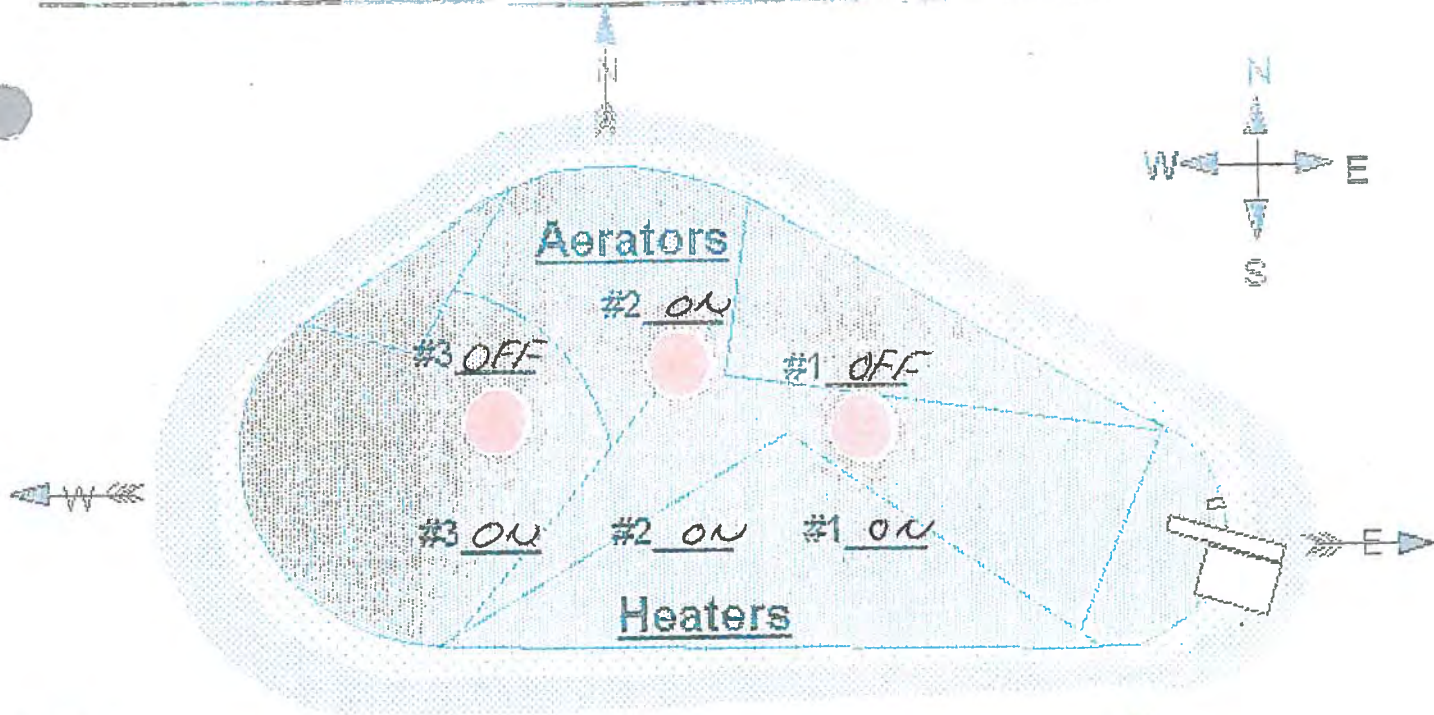
7-30-12  
Date

Dave Anderson  
Supervisor Review

7-30-12  
Date

Comments Water Added over A 4day weekend, th-m-, Turned water (up.) to keep pond at 2 to 3 inch +

# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 22.7

Oxygen 3

pH 9.48

Time 0600

Water Level +2.5"

Water Meter-Stop 2418351

Water Meter-Start 2418351

Water Added 0

Air Temp. 13.3

Wind Direction W-E

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

## ODOR---- SLIGHT

## East-

Water Temp 22.6

Oxygen 3

pH 9.49

Time 0630

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion some

Animal Burrows some

Weed Control some

## Percolation Pond

Water Level- NOT Flowing

Erosion some

Animal Burrows some

Weed Control some

Diane Jendron  
inspected

7-26-12  
Date

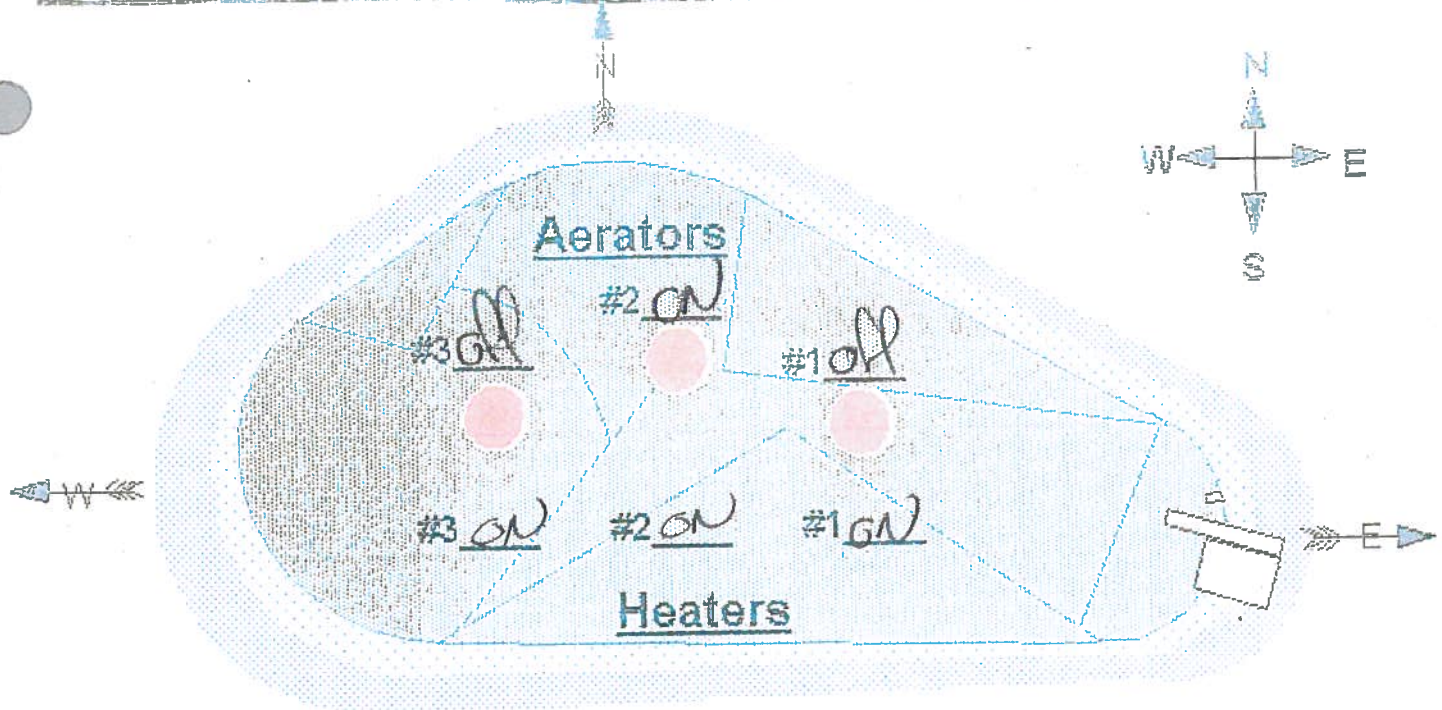
Dave Amador  
supervisor Review

7-26-12  
Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 28.7  
Oxygen 12  
pH 9.87  
Time 1330



## East-

Water Temp 28.9  
Oxygen 12  
pH 9.81  
Time 1330

Water Level +3"  
Water Meter-Stop 7418851  
Water Meter-Start 7418351

## COLOR----

Green ☒  
Green Brown ☐  
Brown Green ☐  
Brown ☐

Common Bacterium-Per Drop ☐  
Activated Sludge ☐  
Glass Tube Test ☒

Water Added ☒  
Air Temp 37.8  
Wind Direction None

ODOR---- Slight.

Erosion Some  
Animal Burrows Some  
Weed Control Some

## Percolation Pond

Water Level- not flowing  
Erosion Some  
Animal Burrows Some  
Weed Control Some

Dan Amaro  
Inspected by

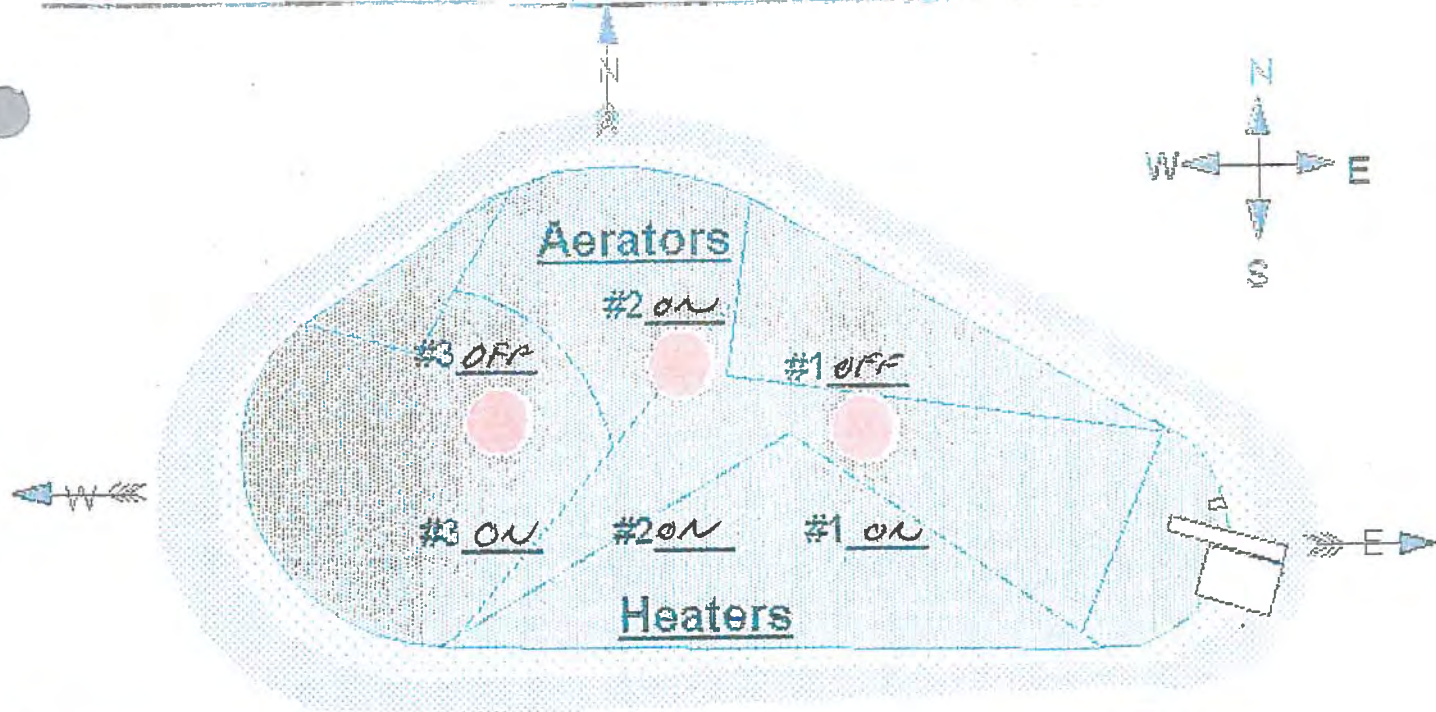
7-23-12  
Date

Dan Amaro  
Supervisor Review

7-23-12  
Date

Comments

# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 21.8

Oxygen 3

pH 9.50

Time 0600

Water Level +4"

Water Meter-Stop 7418351

Water Meter-Start 7417842

Water Added 509

Air Temp. 17.2

Wind Direction NONE

## East-

Water Temp 21.4

Oxygen 4

pH 9.54

Time 0630

## COLOR----

Green ☒

Green Brown ☐

Brown Green ☐

Brown ☐

Common Bacterium-Per Drop ☐

Activated Sludge ☐

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## ODOR---- SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Daniel  
Inspected by

7-19-12  
Date

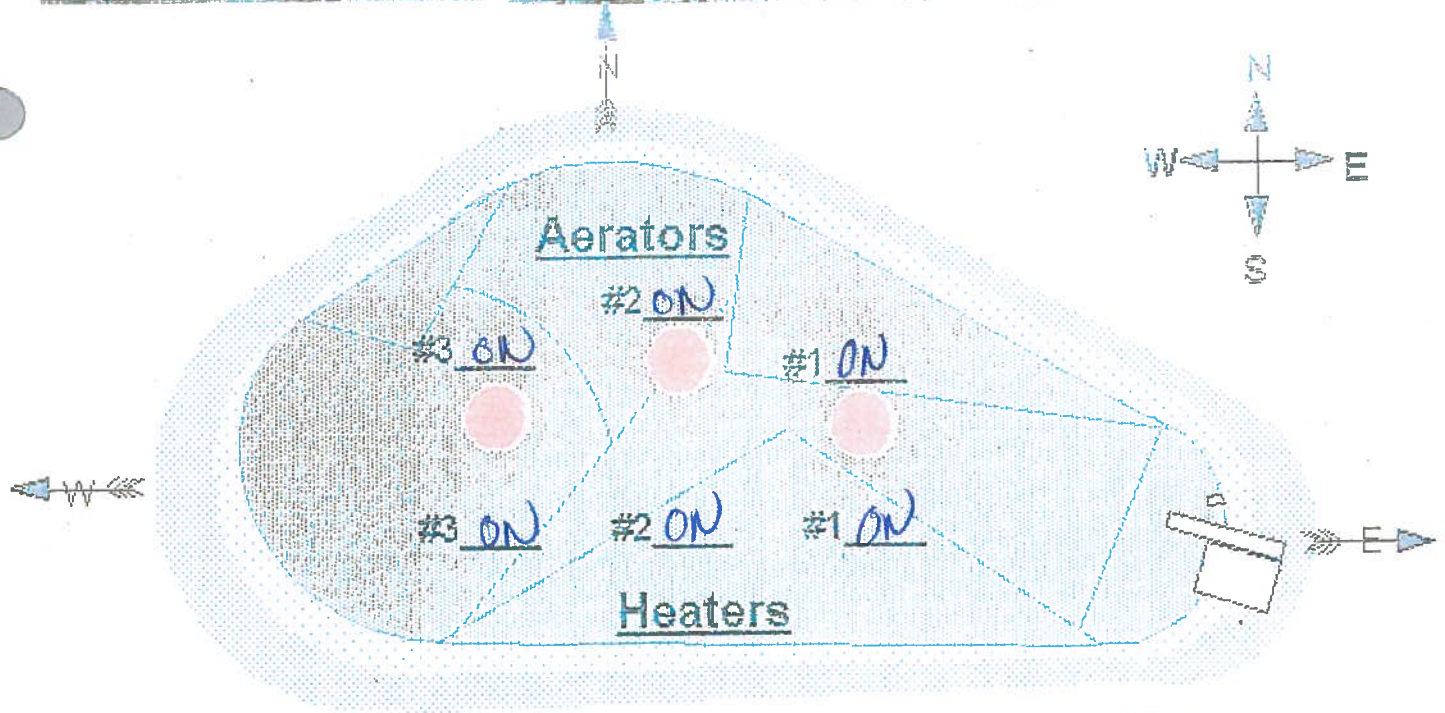
Dave Anderson  
Supervisor Review

7-19-12  
Date

Comments



# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 26.9  
 Oxygen 12  
 pH 10.24  
 Time 1330

## East-

Water Temp 27.1  
 Oxygen 12  
 pH 10.40  
 Time 1330

## COLOR----

Water Level +5  
 Water Meter-Stop 7417842  
 Water Meter-Start 7375273

Green \_\_\_\_\_  
 Green Brown ☒  
 Brown Green \_\_\_\_\_  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_  
 Glass Tube Test ☒

Water Added 47.639  
 Air Temp. 30.8  
 Wind Direction W to E

ODOR---- slight.

Erosion slight  
 Animal Burrows slight  
 Weed Control slight

## Percolation Pond

Water Level Flowing / plug broke.  
 Erosion slight  
 Animal Burrows slight  
 Weed Control slight

Darc Anderson  
 Inspected by

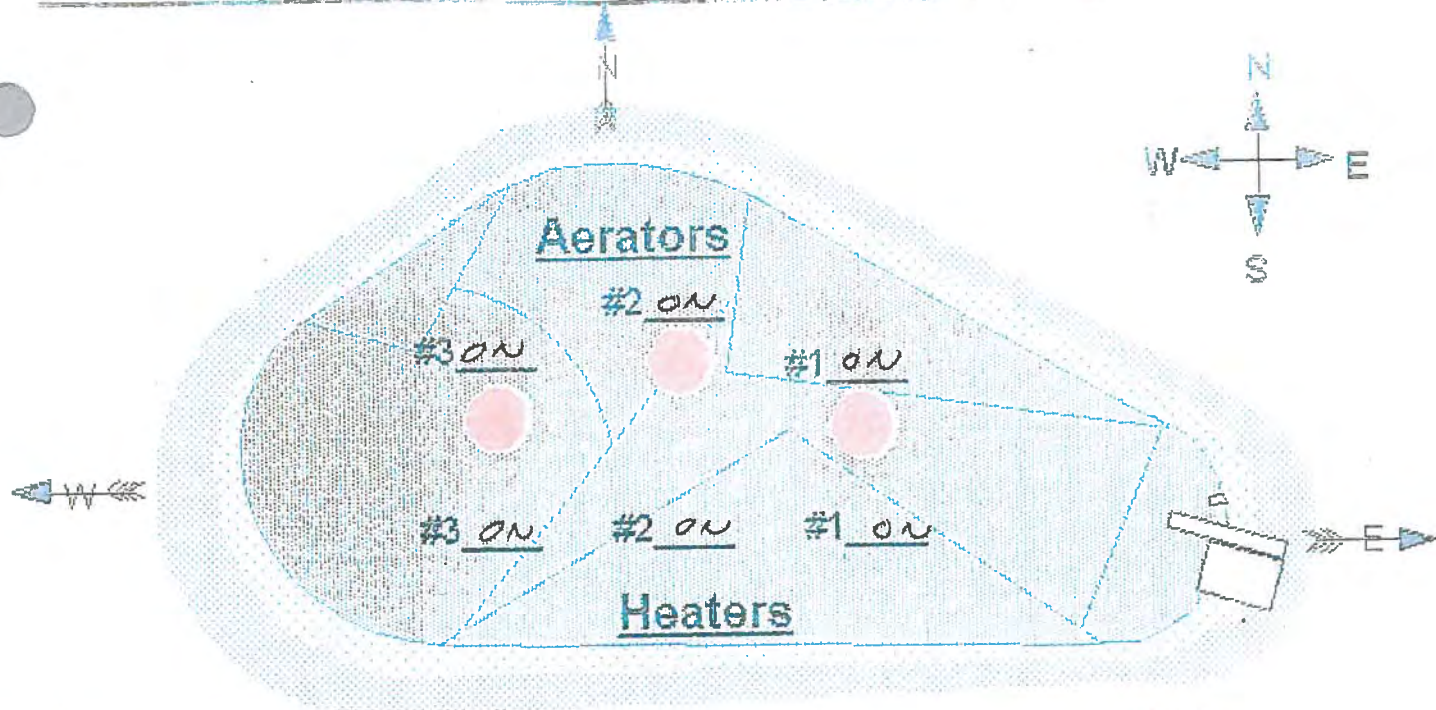
7-16-2012  
 Date

Darc Anderson  
 Supervisor Review

7-16-2012  
 Date

Comments Water added over 4 days  
Water flowing into overflow - made contact with  
short brigman, turned off all make up water.

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 24.2

Oxygen 4

pH 9.43

Time 0600

Water Level +4"

Water Meter-Stop 7375273

Water Meter-Start 7349005

Water Added 26,268

Air Temp. 26.1

Wind Direction NW

## East-

Water Temp 24.1

Oxygen 4

pH 9.42

Time 0630

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ✓

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## COLOR----

Green \_\_\_\_\_

Green Brown ✓

Brown Green \_\_\_\_\_

Brown \_\_\_\_\_

## ODOR----/SLIGHT

## Percolation Pond

Water Level- SOME

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Dan Jensen  
Inspected by

7-12-12  
Date

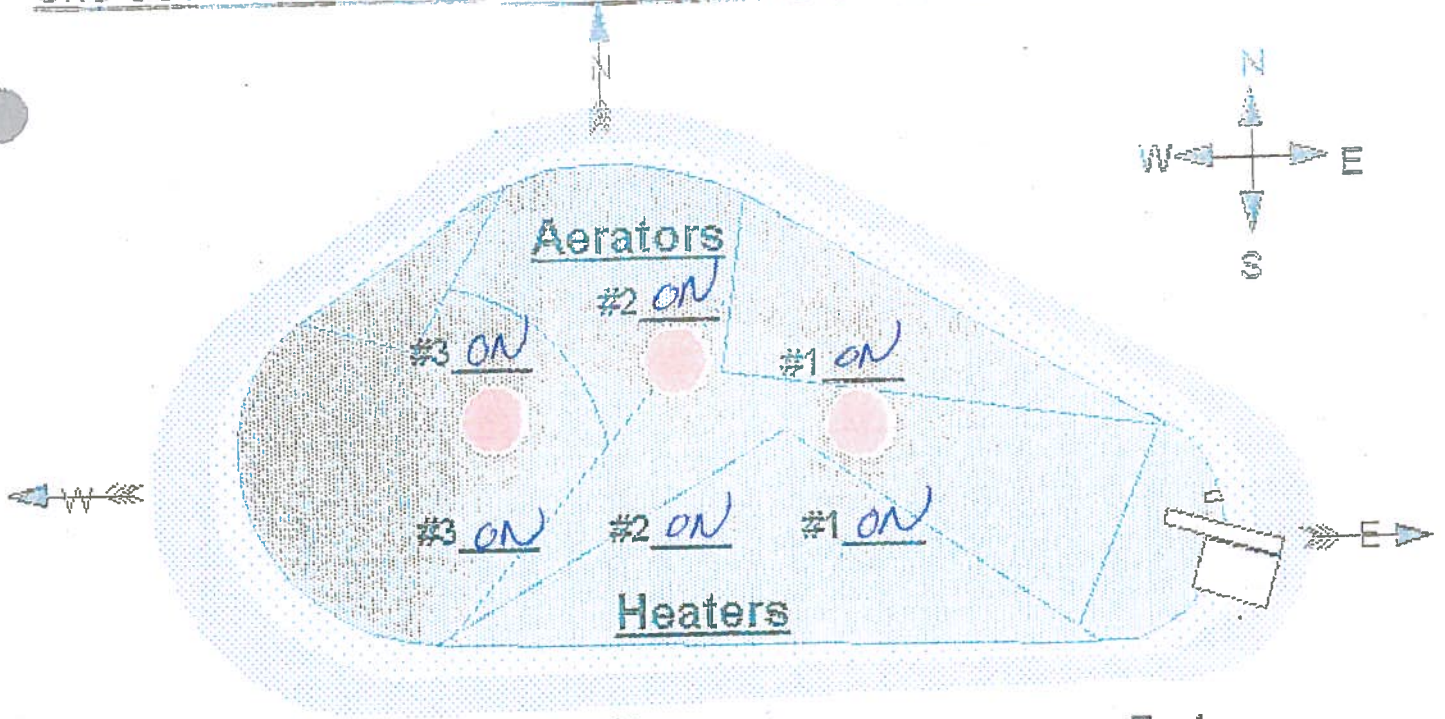
Dan Anderson  
Supervisor Review

7-16-12  
Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 25.7  
 Oxygen 12  
 pH 9.92  
 Time 1330

## East-

Water Temp 28.2  
 Oxygen 12  
 pH 9.82  
 Time 1330

## COLOR----

Green \_\_\_\_\_  
 Green Brown \_\_\_\_\_  
 Brown Green ☒  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion Some

Animal Burrows Some

Weed Control Some

Water Level +4

Water Meter-Stop 7349005

Water Meter-Start 7294385

Water Added 54,620 - see comments.

Air Temp 37.8

Wind Direction W to E

## ODOR-----

## Percolation Pond

Water Level- Not Flowing.

Erosion Some

Animal Burrows Some

Weed Control Some

Inspected by

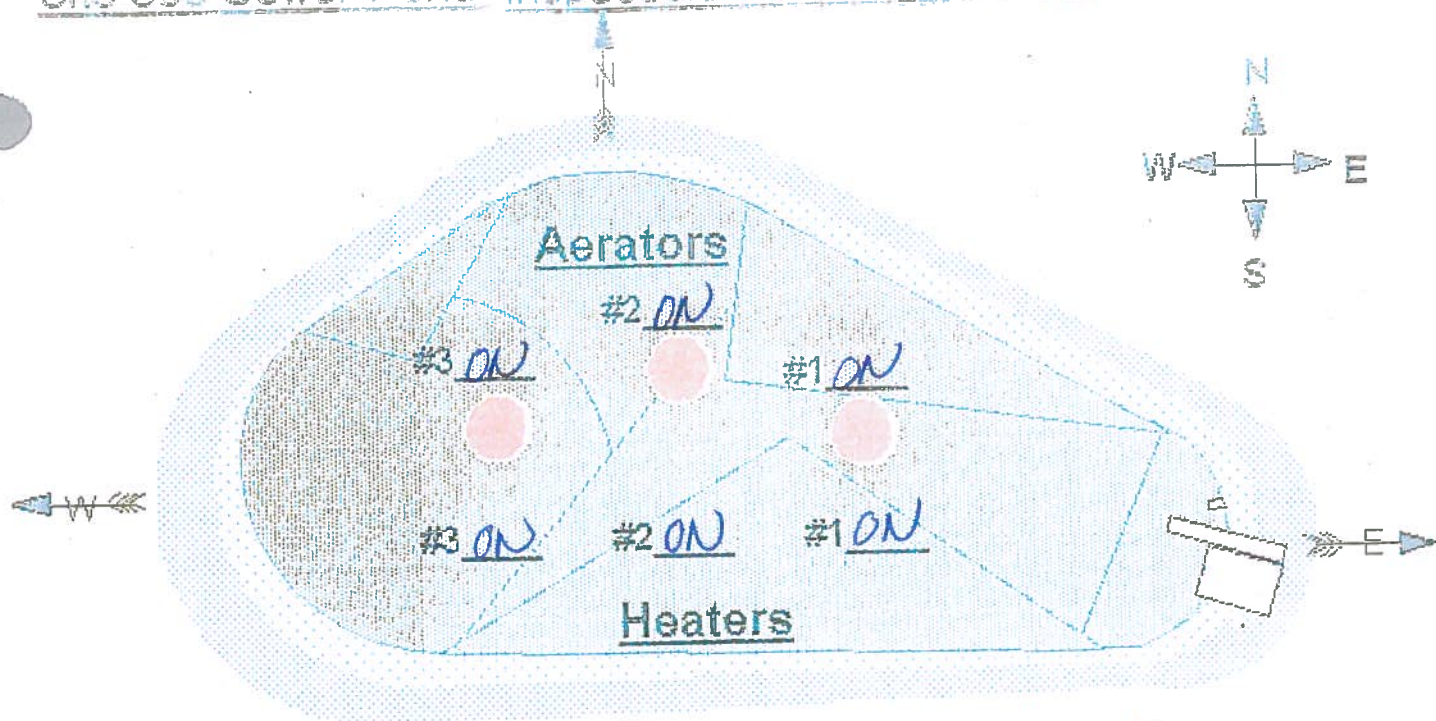
7-9-12  
 Date

Supervisor Review

7-9-12  
 Date

Comments water Added over A  
seven day period

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 26.2  
 Oxygen 12  
 pH 9.42  
 Time 1300

## East-

Water Temp 26.8  
 Oxygen 12  
 pH 9.60  
 Time 1300

## COLOR----

Green \_\_\_\_\_  
 Green Brown \_\_\_\_\_  
 Brown Green ✓  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_  
 Glass Tube Test ✓

Water Level +3 3/4  
 Water Meter-Stop 7294385  
 Water Meter-Start 7266980

Water Added 27405  
 Air Temp. 33.3  
 Wind Direction W4E

ODOR----/ slight

Erosion some  
 Animal Burrows some  
 Weed Control some

## Percolation Pond

Water Level- Not Flowing  
 Erosion some  
 Animal Burrows some  
 Weed Control some

Dane Anderson  
 Inspected by

7-2-2012  
 Date

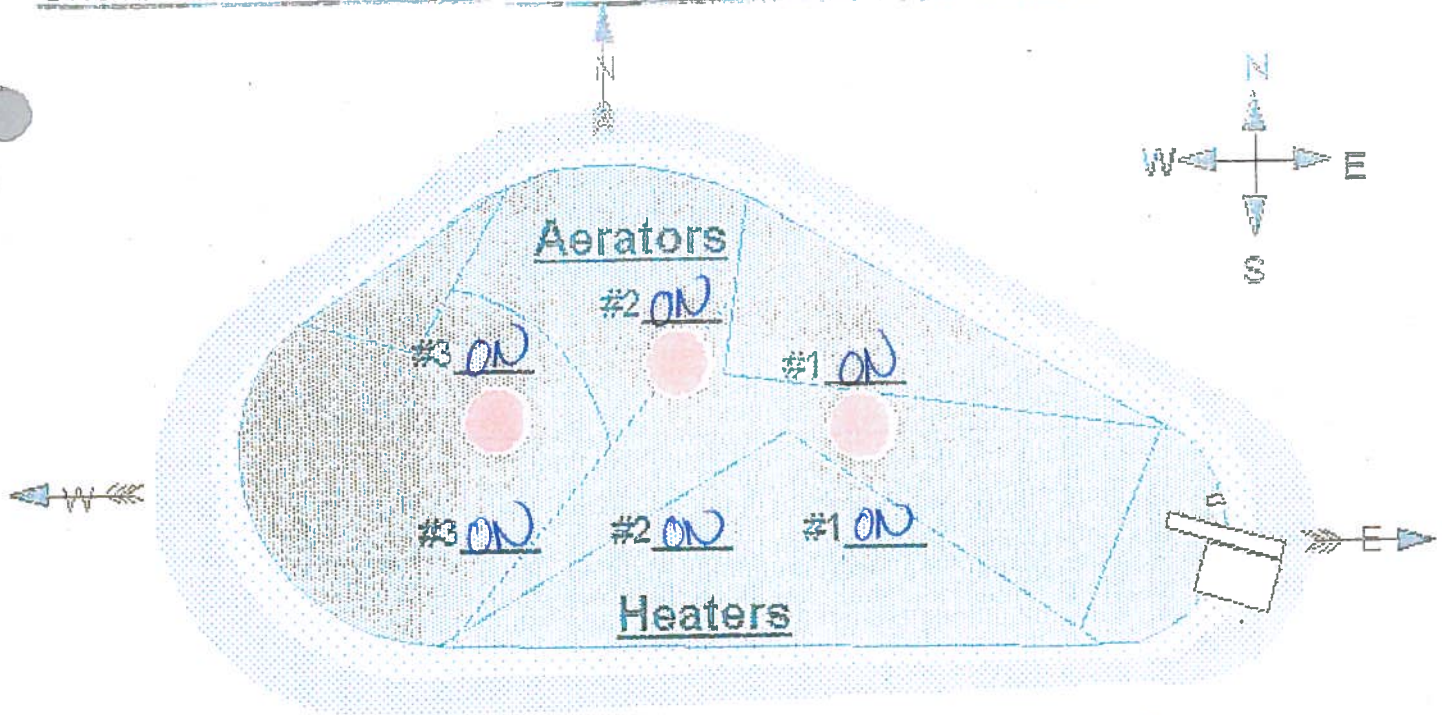
Dane Anderson  
 Supervisor Review

7-2-2012  
 Date

Comments Water Added over a 4 day weekend



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 27.2  
 Oxygen 12  
 pH 9.62  
 Time 1300

## East-

Water Temp 26.8  
 Oxygen 12  
 pH 9.66  
 Time 1300

## COLOR----

Green \_\_\_\_\_  
 Green Brown \_\_\_\_\_  
 Brown Green ✓  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_  
 Glass Tube Test ✓

Water Level +3 1/2  
 Water Meter-Stop 721d980  
 Water Meter-Start 7254246

Water Added 10.120  
 Air Temp. 33.3  
 Wind Direction W to E

ODOR---- slight.

Erosion Good  
 Animal Burrows Good  
 Weed Control Good

## Percolation Pond

Water Level- not flowing  
 Erosion Good  
 Animal Burrows Good  
 Weed Control Good

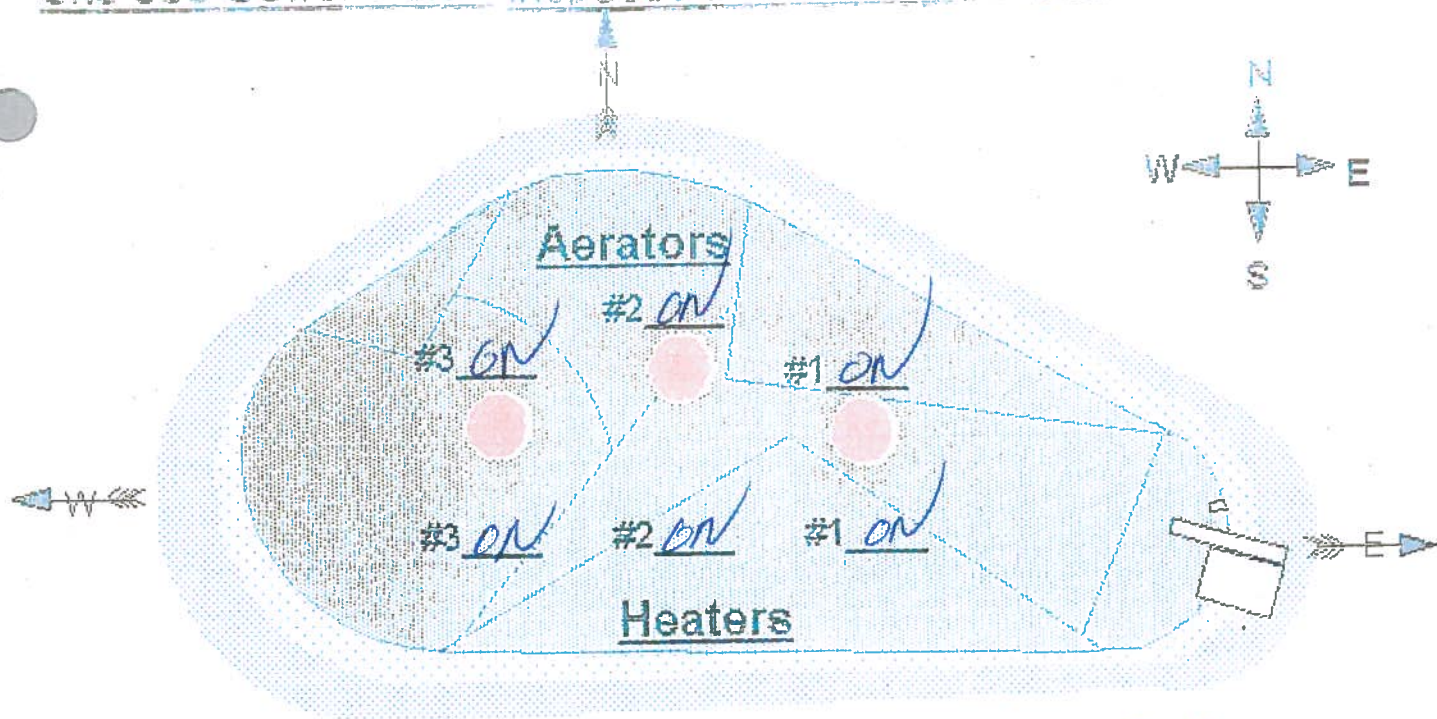
Dave Anderson  
 Inspected by  
Dave Anderson  
 Supervisor Review

6-28-12  
 Date

6-28-12  
 Date

Comments \_\_\_\_\_

# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 25.6  
 Oxygen 12  
 pH 9.44  
 Time 1300

## East-

Water Temp 24.8  
 Oxygen 12  
 pH 9.42  
 Time 1300

## COLOR----

Green \_\_\_\_\_  
 Green Brown \_\_\_\_\_  
 Brown Green ✓  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ✓

Water Level 13 1/2  
 Water Meter-Stop 7244126  
 Water Meter-Start 7233073

Water Added 10.053

Air Temp. 27.1

Wind Direction W to E

ODOR----/ Slight

Erosion some

Animal Burrows some

Weed Control some

## Percolation Pond

Water Level- not flowing

Erosion some

Animal Burrows some

Weed Control some

Dave Anderson  
 Inspected by

6-25-12  
 Date

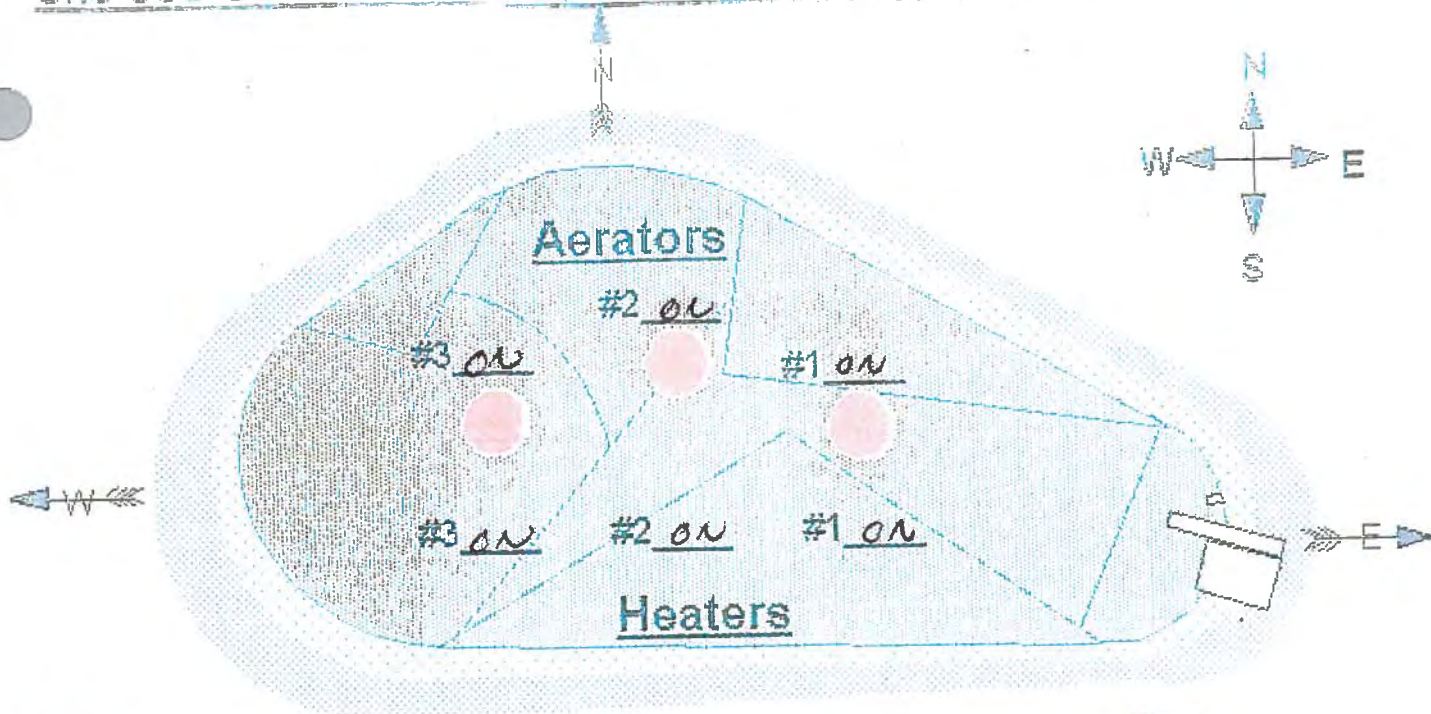
Dave Anderson  
 Supervisor Review

6-25-12  
 Date

Comments



# Site 300 Sewer Pond- Inspection/Monitoring Report



## West-

Water Temp 21.7

Oxygen 3

pH 9.36

Time 0600

Water Level +3 1/2

Water Meter-Stop 7233073

Water Meter-Start 7226448

Water Added 6,625

Air Temp 16.7

Wind Direction NONE

## COLOR----

Green \_\_\_\_\_

Green Brown \_\_\_\_\_

Brown Green ☒

Brown \_\_\_\_\_

## ODOR----SLIGHT

## East-

Water Temp 21.8

Oxygen 3

pH 9.34

Time 0630

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

## Percolation Pond

Water Level-NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Deon Lark  
Inspected by

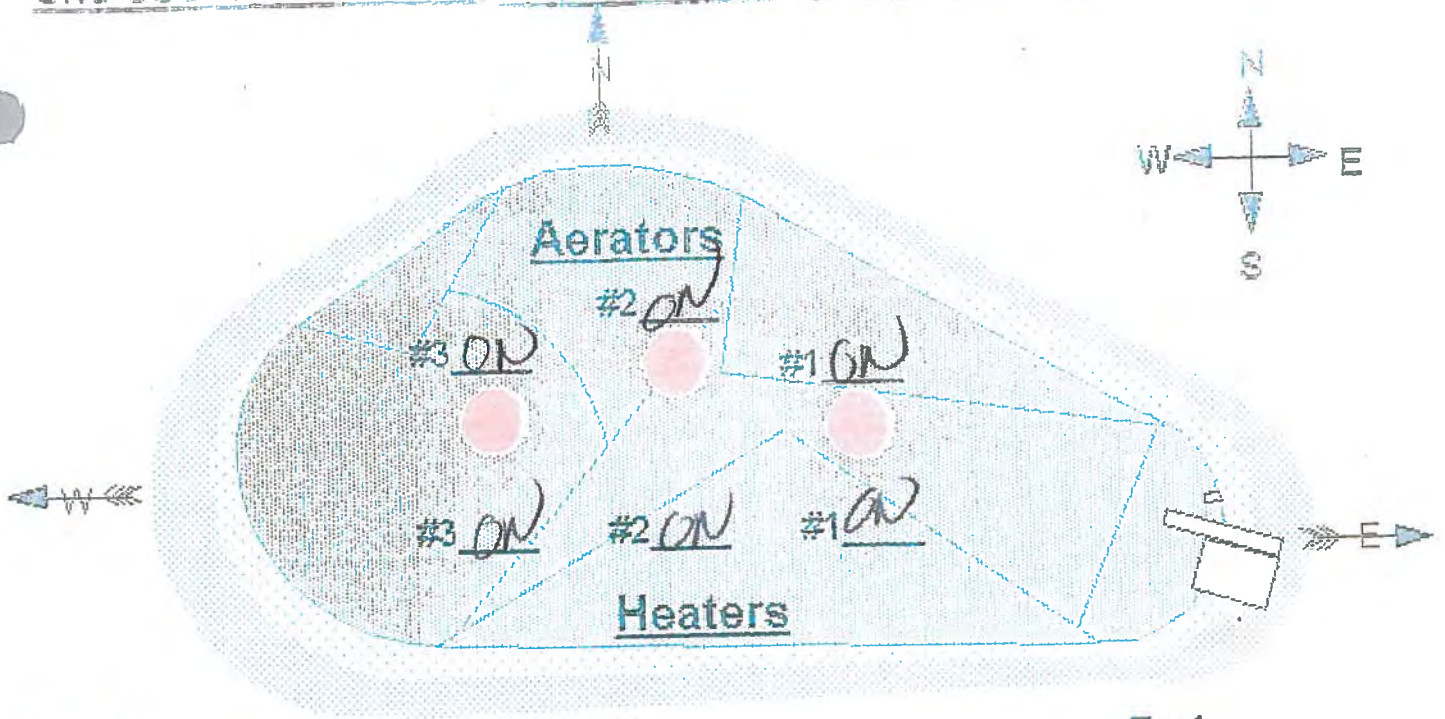
6-21-12  
Date

ARC Amore  
Supervisor Review

6-21-12  
Date

Comments

# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 22.1  
 Oxygen 12  
 pH 9.40  
 Time 1500

## East-

Water Temp 21.7  
 Oxygen 12  
 pH 9.32  
 Time 1300

## COLOR----

Green \_\_\_\_\_  
 Green Brown \_\_\_\_\_  
 Brown Green ☒  
 Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_  
 Glass Tube Test ☒

Water Level 4"  
 Water Meter-Stop 7226418  
 Water Meter-Start 7178609

Water Added 47,639

Air Temp. 37.8

Wind Direction WAVE

## ODOR-----

Erosion some  
 Animal Burrows some  
 Weed Control some

## Percolation Pond

Water Level- not flowing

Erosion some

Animal Burrows some

Weed Control some

Pete Anderson  
 Inspected by

6-18-12  
 Date

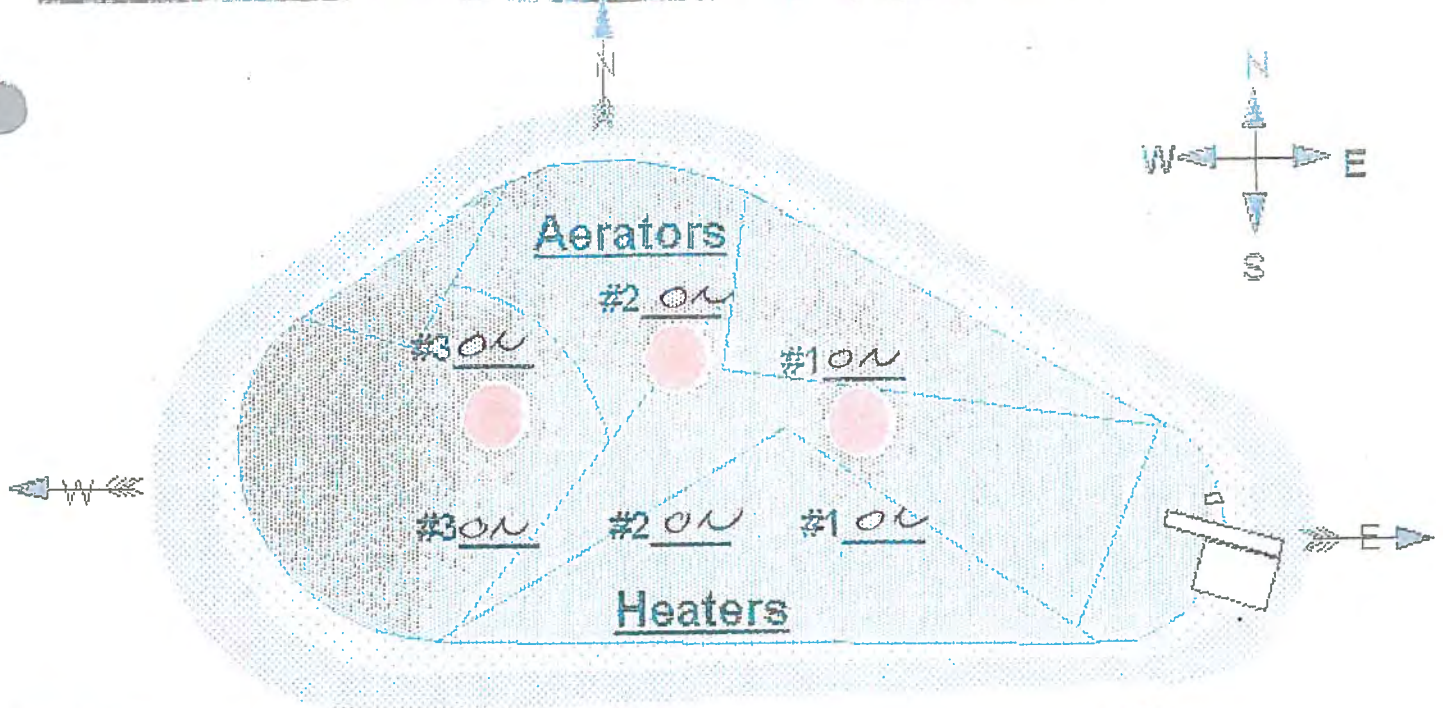
Pete Anderson  
 Supervisor Review

6-18-12  
 Date

Comments foam on East End.



# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 22.3

Oxygen 6

pH 9.26

Time 0600

## East-

Water Temp 21.8

Oxygen 6

pH 9.24

Time 0630

## COLOR----

Green \_\_\_\_\_

Green Brown \_\_\_\_\_

Brown Green ☒

Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Water Level +4 1/2"

Water Meter-Stop 7215147

Water Meter-Start 7178809

Water Added 36,388

Air Temp. 17.8

Wind Direction NONE

## ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion SOME

Animal Burrows SOME

Weed Control SOME

Thompson  
Inspected by

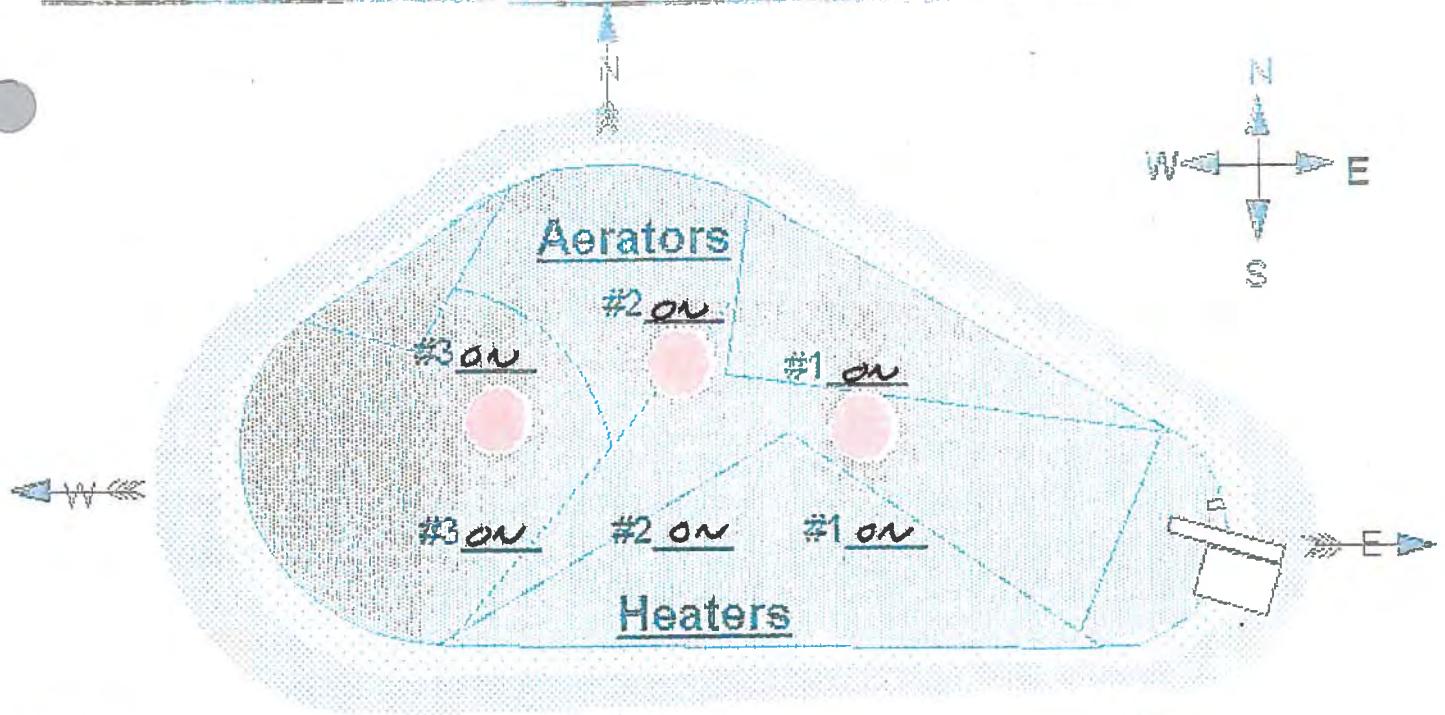
6-14-12  
Date

Dave Amador  
Supervisor Review

6-18-12  
Date

Comments \_\_\_\_\_

# Site 300 Sewer Pond- inspection/Monitoring Report



## West-

Water Temp 18.2

Oxygen 6

pH 9.21

Time 0600

## East-

Water Temp 16.8

Oxygen 3

pH 9.23

Time 0630

## COLOR----

Green \_\_\_\_\_

Green Brown \_\_\_\_\_

Brown Green ☒

Brown \_\_\_\_\_

Common Bacterium-Per Drop \_\_\_\_\_

Activated Sludge \_\_\_\_\_

Glass Tube Test ☒

Erosion some

Animal Burrows some

Weed Control some

Water Level +5 1/4"

Water Meter-Stop 7197099

Water Meter-Start 7178809

Water Added 18,290

Air Temp. 17.2

Wind Direction W-E

ODOR----SLIGHT

## Percolation Pond

Water Level- NOT FLOWING

Erosion some

Animal Burrows some

Weed Control some

D. J. J. J.  
inspected by

6-7-12  
Date

D. J. J. J.  
Supervisor Review

6-8-12  
Date

Comments

## **Appendix B**

### **Cooling Tower Network**

**Cooling Tower Blow Down Effluent Monitoring  
Network with Discharges to Percolation Pits  
(Bldgs. 801, 812, 817A, 825, 826, 827A, and 851)  
and**

**Cooling Tower Percolation Pit Inspection Forms**

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester Annual Report 2012*

**Table B-1. Site 300 cooling tower wastewater monitoring network second semester/annual 2012 anions data summary.**

<b>Building/Location</b>	<b>Date</b>	<b>Sodium (mg/L)</b>	<b>Chloride (mg/L)</b>	<b>Nitrate (as NO<sub>3</sub>) (mg/L)</b>	<b>Sulfate (mg/L)</b>	<b>Fluoride (mg/L)</b>
3-801ACT01-TW	May 22	1,400	530	3.1	1,100	1.7
3-801ACT01-TW	Oct 10	290	110	0.85	240	0.49
3-817ACT01-TW	Jun 27	230	91	<0.5	190	0.32
3-817ACT01-TW	Oct 10	230	88	<0.5	180	0.40
3-825ACT01-TW	May 22	230	83	0.58	180	0.28
3-825ACT01-TW	Oct 10	220	83	<0.5	170	0.38
3-826FCT01-TW	Jan 30	220	82	0.61	170	0.33
3-826FCT01-TW	May 22	290	100	<0.5	220	0.33
3-826FCT01-TW	Oct 10	250	95	<0.5	200	0.46
3-827ACT01-TW	May 22	260	100	0.50	210	0.36
3-827ACT01-TW	Oct 10	250	99	0.51	210	0.43
3-851BFCT03-TW	May 22	2,800	1,200	12	2,400	4.1
3-851BFCT03-TW	Oct 18	310	120	0.86	240	0.49

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table B-2. Site 300 cooling tower wastewater monitoring network second semester/annual 2012 metals analysis data summary.**

Analyte ( $\mu\text{g/L}$ )	Month	3-801ACT01- TW	3-817ACT01- TW	3-825ACT01- TW	3-826FCT01- TW	3-827ACT01- TW	3-851BFCT03- TW
Aluminum	Q1	–	–	–	<50	–	–
	Q2	130	<50	<50	<50	59	260
	Q4	<50	65	<50	<50	<50	<50
Arsenic	Q1	–	–	–	<2	–	–
	Q2	<2	<2	<2	<2	<2	<2
	Q4	<2	<2	<2	<2	<2	<2
Barium	Q1	–	–	–	<25	–	–
	Q2	38	<25	<25	<25	<25	<120
	Q4	<25	<25	<25	<25	<25	<25
Boron	Q1	–	–	–	970	–	–
	Q2	5,700	1,300	890	1,100	1,200	12,000
	Q4	1,200	930	880	1,100	1,000	1,300
Cadmium	Q1	–	–	–	<50	–	–
	Q2	<50	<50	<50	<50	<50	<250
	Q4	<50	<50	<50	<50	<50	<50
Calcium	Q1	–	–	–	8,800	–	–
	Q2	17,000	8,000	7,300	9,300	11,000	15,000
	Q4	16,000	8,900	7,600	13,000	10,000	19,000
Chromium	Q1	–	–	–	<1	–	–
	Q2	1.8	<1	<1	<1	<1	7.9
	Q4	<1	<1	<1	<1	<1	<1
Hexavalent Chromium	Q1	–	–	–	<1	–	–
	Q2	1.6	<1	<1	<1	<1	6.4
	Q4	<1	<1	<1	<1	<1	<1
Copper	Q1	–	–	–	9.8	–	–
	Q2	7.0	22	19	5.0	11	16
	Q4	3.7	77	8.2	4.0	6.7	2.3
Iron	Q1	–	–	–	<100	–	–
	Q2	<200	<100	<100	<100	170	920
	Q4	<100	730	<100	<100	<100	200
Lead	Q1	–	–	–	<5	–	–
	Q2	<5	<5	<5	<5	<5	<25
	Q4	<5	6.8	<5	<5	<5	<5
Magnesium	Q1	–	–	–	<500	–	–
	Q2	<1,000	<500	<500	<500	<500	<2,500
	Q4	<500	<500	<500	<500	<500	<500
Manganese	Q1	–	–	–	<30	–	–
	Q2	<60	<30	<30	<30	<30	<150
	Q4	<30	<30	<30	<30	<30	<30
Mercury	Q2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Q4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum	Q1	–	–	–	<25	–	–
	Q2	120	28	<25	<25	25	250
	Q4	25	<25	<25	<25	<25	27
Nickel	Q1	–	–	–	<2	–	–
	Q2	<2	<2	<2	<2	<2	<2
	Q4	<2	<2	<2	<2	<2	<2

(cont.)

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table B-2. Site 300 cooling tower wastewater monitoring network second semester/annual 2012 metals analysis data summary.**

Analyte ( $\mu\text{g/L}$ )	Month	3-801ACT01- TW	3-817ACT01- TW	3-825ACT01- TW	3-826FCT01- TW	3-827ACT01- TW	3-851BFCT03- TW
Potassium	Q1	–	–	–	9,400	–	–
	Q2	54,000	8,800	8,500	11,000	10,000	100,000
	Q4	11,000	8,500	7,900	9,700	9,300	14,000
Selenium	Q1	–	–	–	<2	–	–
	Q2	<2	<2	<2	<2	<2	<10
	Q4	<2	<2	<2	<2	<2	<2
Silver	Q1	–	–	–	<1	–	–
	Q2	<1	<1	<1	<1	<1	<5
	Q4	<1	<1	<1	<1	<1	<1
Vanadium	Q1	–	–	–	<20	–	–
	Q2	<20	<20	<20	<20	<20	<100
	Q4	<20	<20	<20	<20	<20	<20
Zinc	Q1	–	–	–	100	–	–
	Q2	<20	570	170	170	55	<100
	Q4	<20	680	58	52	31	27

Note:

– = Analysis not required.

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table B-3. Site 300 cooling tower wastewater monitoring network second semester/annual 2012 physical characteristics data summary.**

Location	Well	Date	pH	Specific Conductance ( $\mu$ mhos/cm)	Total Alkalinity (as CaCO <sub>3</sub> ) (mg/L)	Total dissolved solids (mg/L)	Total Hardness (as CaCO <sub>3</sub> ) (mg/L)	Total Phosphorus (as PO <sub>4</sub> ) (mg/L)
B801	3-801ACT01-TW	May 22	9.3	5,380	1,100	3,900	45	0.59
B801	3-801ACT01-TW	Oct 10	8.8	1,430	290	940	40	0.22
B817	3-817ACT01-TW	Jun 27	8.6	1,140	220	780	21	2.0
B817	3-817ACT01-TW	Oct 10	8.5	1,120	220	770	24	0.29
B825	3-825ACT01-TW	May 22	8.5	1,050	210	710	19	1.6
B825	3-825ACT01-TW	Oct 10	8.5	1,060	200	690	20	<0.15
B826	3-826FCT01-TW	Jan 30	8.3	1,030	200	740	23	<0.15
B826	3-826FCT01-TW	May 22	8.7	1,280	250	860	25	2.2
B826	3-826FCT01-TW	Oct 10	9.0	1,210	250	820	34	0.34
B827	3-827ACT01-TW	May 22	8.8	1,200	260	860	28	0.43
B827	3-827ACT01-TW	Oct 10	8.7	1,250	250	820	26	0.29
B851	3-851BFCT03-TW	May 22	9.5	10,200	2,200	8,200	38	1.6
B851	3-851BFCT03-TW	Oct 18	8.8	1,440	300	990	48	0.20



# FIELD TRACKING FORM

## Semi-Annual SITE 300 Cooling Towers

### Special Instructions:

Should be sampled in early April and October.  
See back of form for additional access information

LAB	CoC#	Ship It #
BC Labs	58168	166796

pH meter calibrated on: 10/10

Specific Conductance meter calibrated on: 10/10

Sample Date: 10/10/12

Location Identifier	Location DUP taken -year/quarter	Sample Time	Initials	Field Measurements		BC Labs				Comments	
				pH	Specific Conductance	S3METALS 500mL Poly	S3ANIONS 500mL Poly	S3WETCHEM 1000mL Poly	E245.2 (Mercury) 500mL Poly Post acidify HNO3		
3-801ACT01-TW	2012/2nd	0955	KS, CF	8.30	120 $\mu$ S	1	1	1	1	851 net running, no sample collected	
3-809ACT01-TW	2012/4th			Off Line							
3-812AFCT01-TW	2008/4th			Not in use							
3-817ACT01-TW	2010/2nd	1020	KS, CF	8.45	983 $\mu$ S	1	1	1	1		
3-825ACT01-TW		1400	KS	8.39	943 $\mu$ S	1	1	1	1		
3-826FCT01-TW	2010/4th	1350	KS	8.53	1075 $\mu$ S	1	1	1	1		
3-827ACT01-TW	2011/2nd	1005	KS, CF	8.47	1116 $\mu$ S	1	1	1	1		
3-851BFCT03-TW	2011/4th	0930									
Duplicate of 3-809ACT01-TW											
3-B9900-01-TW	817	1020				1	1	1	1		

☒ Copy to Analyst, Rick Blake.



# Chain of Custody

EPD: EMAD/PRAD/ESPD  
Lawrence Livermore National Laboratory  
P.O. Box 808 L-629  
Livermore, CA 94551

Work Authorized By: EPD  
TRR Approver: RUDY JIMENEZ  
Project Info:

Access/COC #: 58168  
Document Control #: 58168  
Requester/LLNL Analyst: R. Blake  
Organization / Sampler: EPD / brunckhors12  
PCI Project #: 35166  
PCI Task #: 1.03.02.06.02.08  
Fax/Email #1: swanson15@llnl.gov  
DMT Additional Copies:

Analytical Lab : BCLABS-BAK  
TAT: 20d  
Analytical Lab Log #:  
Project/Network: COOLTOWER  
LLNL Acct #: 3297-47  
Release #: UNICARD  
Fax/Email #2:

Additional Instructions:

Sample ID	Sampled Date/Time	Matrix	Cont. Type	Cont. Count	Study Area	Req. Analysis	Analysis Detail	Lab Instructions
3-801ACT01-01-TW	10/10/2012 09:55	TW	P	1	COOLTOWER	E245.2	ALL	
3-801ACT01-01-TW	10/10/2012 09:55	TW	P	1	COOLTOWER	S3ANIONS	ALL	
3-801ACT01-01-TW	10/10/2012 00:00	TW	P	0	COOLTOWER	S3METALS	ALL	
3-801ACT01-01-TW	10/10/2012 09:55	TW	P	1	COOLTOWER	S3METALS	TOTAL	
3-801ACT01-01-TW	10/10/2012 09:55	TW	P	1	COOLTOWER	S3WETCHEM	ALL	
3-817ACT01-01-TW	10/10/2012 10:20	TW	P	1	COOLTOWER	E245.2	ALL	
3-817ACT01-01-TW	10/10/2012 10:20	TW	P	1	COOLTOWER	S3ANIONS	ALL	
3-817ACT01-01-TW	10/10/2012 10:20	TW	P	0	COOLTOWER	S3METALS	ALL	
3-817ACT01-01-TW	10/10/2012 00:00	TW	P	1	COOLTOWER	S3METALS	TOTAL	
3-817ACT01-01-TW	10/10/2012 10:20	TW	P	1	COOLTOWER	S3WETCHEM	ALL	
3-817ACT01-01-TW	10/10/2012 10:20	TW	P	1	COOLTOWER	E245.2	ALL	
3-825ACT01-01-TW	10/10/2012 14:00	TW	P	1	COOLTOWER	S3ANIONS	ALL	
3-825ACT01-01-TW	10/10/2012 00:00	TW	P	0	COOLTOWER	S3METALS	ALL	
3-825ACT01-01-TW	10/10/2012 14:00	TW	P	1	COOLTOWER	S3METALS	TOTAL	
3-825ACT01-01-TW	10/10/2012 14:00	TW	P	1	COOLTOWER	S3WETCHEM	ALL	
3-826ACT01-01-TW	10/10/2012 13:55	TW	P	1	COOLTOWER	E245.2	ALL	
3-826ACT01-01-TW	10/10/2012 13:55	TW	P	1	COOLTOWER	S3ANIONS	ALL	
3-826ACT01-01-TW	10/10/2012 13:55	TW	P	0	COOLTOWER	S3METALS	ALL	
3-826ACT01-01-TW	10/10/2012 00:00	TW	P	1	COOLTOWER	S3METALS	TOTAL	
3-826ACT01-01-TW	10/10/2012 13:55	TW	P	1	COOLTOWER	S3WETCHEM	ALL	
3-826ACT01-01-TW	10/10/2012 10:05	TW	P	1	COOLTOWER	E245.2	ALL	
3-827ACT01-01-TW	10/10/2012 10:05	TW	P	1	COOLTOWER	S3ANIONS	ALL	
3-827ACT01-01-TW	10/10/2012 00:00	TW	P	0	COOLTOWER	S3METALS	ALL	
3-827ACT01-01-TW	10/10/2012 10:05	TW	P	1	COOLTOWER	S3METALS	TOTAL	
3-827ACT01-01-TW	10/10/2012 10:05	TW	P	1	COOLTOWER	S3WETCHEM	ALL	
3-B9900-01-TW	10/10/2012 10:20	TW	P	1	COOLTOWER	E245.2	ALL	
3-B9900-01-TW	10/10/2012 10:20	TW	P	1	COOLTOWER	S3ANIONS	ALL	

Relinquished Signature	Company	Date	Time	Received Signature	Company	Date	Time
1 <i>[Signature]</i>	LLNL/EPD	10/10/2012	1530	2			
2				3			
3				4			
4				5			

Revision Printed: 10/13/2011/11/16/10

Signature Order - 1: Sampler, 2: Courier, 3: Lab, 4: Analyst, 5: DMT

<b>EPD: EMAD/PRAD/ESPD</b> <b>Lawrence Livermore National Laboratory</b> <b>P.O. Box 808 L-629</b> <b>Livermore, CA 94551</b>	<b>Access/COC #:</b> 58168 <b>Document Control #:</b> 58168 <b>Requester/LLNL Analyst:</b> R. Blake <b>Organization / Sampler:</b> EPD / brunckhors12 <b>PCI Project #:</b> 35166 <b>PCI Task #:</b> 1.03.02.06.02.08 <b>Fax/Email #1:</b> swanson15@llnl.gov <b>DMT Additional Copies:</b>	<b>Analytical Lab :</b> BCLABS-BAK <b>TAT:</b> 20d <b>Analytical Lab Log #:</b> <b>Project/Network:</b> COOLTOWER <b>LLNL Acct #:</b> 3297-47 <b>Release #:</b> UNICARD <b>Fax/Email #2:</b>	<b>Additional Instructions:</b>
<b>Work Authorized By:</b> EPD <b>TRR Approver:</b> RUDY JIMENEZ <b>Project Info:</b>			

<b>EPD: EMAD/PRAD/ESPD</b> <b>Lawrence Livermore National Laboratory</b> <b>P.O. Box 808 L-629</b> <b>Livermore, CA 94551</b>	<b>Access/COC #:</b> 58168 <b>Document Control #:</b> 58168 <b>Requester/LLNL Analyst:</b> R. Blake <b>Organization / Sampler:</b> EPD / brunckhors12 <b>PCI Project #:</b> 35166 <b>PCI Task #:</b> 1.03.02.06.02.08 <b>Fax/Email #1:</b> swanson15@llnl.gov <b>DMT Additional Copies:</b>	<b>Analytical Lab :</b> BCLABS-BAK <b>TAT:</b> 20d <b>Analytical Lab Log #:</b> <b>Project/Network:</b> COOLTOWER <b>LLNL Acct #:</b> 3297-47 <b>Release #:</b> UNICARD <b>Fax/Email #2:</b>	<b>Additional Instructions:</b>
<b>Work Authorized By:</b> EPD <b>TRR Approver:</b> RUDY JIMENEZ <b>Project Info:</b>			

[illegible]

	Relinquished Signature	Company	Date	Time	Received Signature	Company	Date	Time
1	<i>[Signature]</i>	LLNL/EPD	10/10/2012	1530	2			
2					3			
3					4			
4					5			



# FIELD TRACKING FORM

## Semi-Annual SITE 300 Cooling Towers

### Special Instructions:

Should be sampled in early April and October.  
See back of form for additional access information

LAB	CoC#	Ship It #
BC Labs	58255	

pH meter calibrated on: 10/18

Specific Conductance meter calibrated on: 10/18

Sample Date: 10/18/12

Location Identifier	Location DUP taken -year/quarter	Sample Time	Initials	Field Measurements		BC Labs	Comments
				pH	Specific Conductance		
3-801ACT01-TW	2012/2nd						
3-809ACT01-TW	2012/4th						
3-812AFCT01-TW	2008/4th			Not in use			
3-817ACT01-TW	2010/2nd						
3-825ACT01-TW							
3-826FCT01-TW	2010/4th						
3-827ACT01-TW	2011/2nd						
3-851BFCT03-TW	2011/4th	1420	KB	8.71	1274 uS	1 1 1	
Duplicate of 3-809ACT01-TW							
3-B9900-01-TW							

☒ Copy to Analyst, Rick Blake.

**EPD: EMAD/PRAD/ESPD**  
**Lawrence Livermore National Laboratory**  
**P.O. Box 808 L-629**  
**Livermore, CA 94551**

Access/COC #: 58255

Document Control #: 58255

**Requester/LLNL Analyst: R. Blake**

**Organization / Sampler:** EPD / brunnchorst2

**PCI Project #: 35166**

**PCI Task #: 1.03.02.06.02.08**

**Fax/Email #1: swanson15@linl.gov**

DMT Additional Copies:

Analytical Lab : BCLABS-BAK

TAT:20d

Analytical Lab Log #:

**Project/Network: COOLTOWER**

**LLNL Acct #: 3297-47**

**Release #: UNICARD**

Fax/Email #2:


**Additional Instructions:**

**Work Authorized By: EPD**

**TRR Approver: RUDY JIMENEZ**

### Project Info:

[illegible]

	Refiniquished Signature	Company	Date	Time	Received Signature	Company	Date	Time
1		LLNL/EPD	10/18/2012	1520				
2								
3								
4								



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 5-1-12 Inspector D. Anderson Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?
2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/No  
 Yes/No

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDQ (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/No

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).

Yes/No

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature

Dave Anderson

Date

5-1-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 6-8-12 Inspector D. LAUREN Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

[Signature]

Date

6-8-12

**Note:** This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 6-8-12 Inspector D. LAUDRAM Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

D. Amaro

Date

6-8-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 6-8-12 Inspector D. Laurum Building Number 817-A

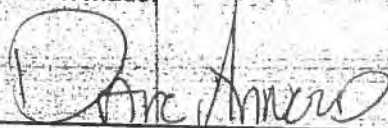
Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____		
_____		

Supervisor's Signature



Date 6-8-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\*  
For Buildings 801, 809, 817A, 826, 827A, and 851  
Waste Discharge Requirements Order Number R5-2008-0148  
Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1

Date 6-8-12 Inspector D. Landrum Building Number 826

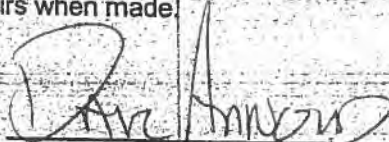
Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	
If yes to any of the above, note date, actions taken, and type of repairs when made.		

Supervisor's Signature



Date

6-8-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\*  
For Buildings 801, 809, 817A, 826, 827A, and 851  
Waste Discharge Requirements Order Number R5-2008-0148  
Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1

Date 6-9-12

Inspector D. L. Anderson

Building Number 827A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?

Yes/~~No~~

2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/~~No~~

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/~~No~~

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris)?

Yes/~~No~~

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature

D. L. Anderson

Date 6-9-12

Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\*  
For Buildings 801, 809, 817A, 826, 827A, and 851  
Waste Discharge Requirements Order Number R5-2008-0148  
Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1

Date 6-9-12 Inspector D. LALON Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes/No	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No	
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No	
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris)?	Yes/No	
If yes to any of the above, note date, actions taken, and type of repairs when made.		

Supervisor's Signature

[Signature]

Date

6-9-12

Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 6-10-12 Inspector D. LANDRUM Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
<p>If yes is indicated to either 1 or 2, contact the ES&amp;H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.</p>		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
<p>If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted</p>		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____ _____ _____
<p>If yes to any of the above, note date, actions taken, and type of repairs when made.</p>		
<p>_____</p>		

Supervisor's Signature

[Signature]

Date

6-10-12

\*Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\*  
For Buildings 801, 809, 817A, 826, 827A, and 851  
Waste Discharge Requirements Order Number R5-2008-0148  
Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1

Date 7-10-12 Inspector D. Landrum Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?	Yes/ <del>No</del>	
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If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	
--	--------------------	--

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature

Dave Anderson

Date

7-10-12

Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7-10-12 Inspector D. LANSUM Building Number 817-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
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If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
--	--------------------	-------------------------

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature [Signature] Date 7-10-12

\*Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7-11-12 Inspector D. LAMORA Building Number 826

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
--	----------------	-------

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris)?	Yes/ <u>No</u>	_____ _____ _____
--	----------------	-------------------------

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature

[Signature]

Date

7-11-12

**Note:** This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7-11-12 Inspector D. Lawson Building Number 827-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

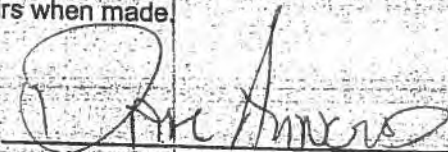
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
--	--------------------	-------

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
--	--------------------	-------------------------

If yes to any of the above, note date, actions taken, and type of repairs when made

Supervisor's Signature



Date

7-11-12

**Note:** This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148.  
**Revision 1:** If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7-11-12 Inspector D. LANDUM Building Number 851

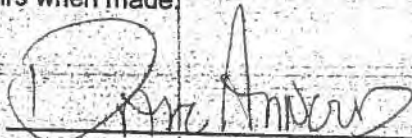
Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature



Date

7-11-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-7-12 Inspector D. Landerum Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

[Signature]

Date

8-7-12

**Note:** This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-7-12 Inspector D. Lannan Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made		
_____		
_____		

Supervisor's Signature

D. Lannan

Date

8-7-12

**Note:** This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-7-12 Inspector D. Lawrence Building Number 817-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

[Signature]

Date

8-7-12

Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-8-12 Inspector D. Lawman Building Number 826

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____		
_____		

Supervisor's Signature

[Signature]

Date

8-8-12

**Note:** This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148.  
**Revision 1:** If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\*  
For Buildings 801, 809, 817A, 826, 827A, and 851  
Waste Discharge Requirements Order Number R5-2008-0148  
Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1

Date 8-8-12 Inspector D. Lamm Building Number 827-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?	Yes/ <u>No</u>	
--	----------------	--

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	
--	----------------	--

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature

D. Lamm

Date 8-8-12

Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-8-12 Inspector D. L. Anderson Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____		
_____		

Supervisor's Signature

[Signature]

Date

8-8-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\*  
For Buildings 801, 809, 817A, 826, 827A, and 851  
Waste Discharge Requirements Order Number R5-2008-0148  
Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1

Date 9-6-12 Inspector D. LAMON Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	
If yes to any of the above, note date, actions taken, and type of repairs when made.		

Supervisor's Signature

[Signature]

Date

9-6-12

Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9-6-12 Inspector D. Lausem Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____		
_____		

Supervisor's Signature

[Signature]

Date 9-6-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9-6-12 Inspector D. Lausman Building Number 817A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

Dan Amaro

Date

9-6-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9-7-12 Inspector D. Hansen Building Number 826

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

[Signature]

Date

9-7-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9-7-12 Inspector D. LANSER Building Number 827-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

[Signature]

Date

9-7-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9-7-12 Inspector D. Anderson Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature

[Signature]

Date

9-7-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10-9-12 Inspector D. LAMORUM Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature

[Signature]

Date

10-9-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10-9-12 Inspector D. Lanoan Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

Dave Anderson

Date

10-9-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10-9-12 Inspector D. Landon Building Number 817-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

[Signature]

Date

10-9-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10-10-12 Inspector D. LANDRUM Building Number 826

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature Dave Anderson Date 10-10-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**


Date 10-10-12 Inspector D. LAMORAN Building Number 827-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature  Date 10-10-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10-10-12 Inspector D. LARSEN Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature Dave Anderson Date 10-10-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11-1-12 Inspector D. Anderson Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature

D. Anderson

Date

11-1-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11-1-12 Inspector D. Anderson Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature D. Anderson Date 11-1-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11-1-12 Inspector D. Lavoie Building Number 817-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

D. Anderson

Date

11-1-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

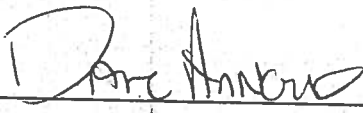
Date 11-2-12 Inspector D. Anderson Building Number 826

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <del>No</del>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <del>No</del>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <del>No</del>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <del>No</del>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made: _____ _____ _____		

Supervisor's Signature  Date 11-2-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11-2-12 Inspector D. Lanson Building Number 827-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature D. Annunzio Date 11-2-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11-2-12 Inspector D. Hansen Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

Dave Arnold

Date

11-2-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12-4-12 Inspector D. LAURUM Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?

Yes/~~No~~

2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/~~No~~

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/~~No~~

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).

Yes/~~No~~

If yes to any of the above, note date, actions taken, and type of repairs when made:

Supervisor's Signature

Dan Andrews

Date

12-4-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12-4-12 Inspector D. Lamm Building Number 809

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?
2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/No

Yes/No

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/No

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).

Yes/No

If yes to any of the above, note date, actions taken, and type of repairs when made:

Supervisor's Signature

Dave Amadio

Date

12-4-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12-4-12

Inspector D. LaGrum

Building Number 817-4

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?

Yes/No

\_\_\_\_\_

2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/No

\_\_\_\_\_

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/No

\_\_\_\_\_

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

\_\_\_\_\_

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).

Yes/No

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If yes to any of the above, note date, actions taken, and type of repairs when made:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Supervisor's Signature

D. Anderson

Date

12-4-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12-6-12

Inspector D. Lauran

Building Number 826

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?
2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/No

Yes/No

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/No

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).

Yes/No

If yes to any of the above, note date, actions taken, and type of repairs when made:

Supervisor's Signature

[Signature]

Date

12-6-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12-6-12

Inspector D. Lavigne

Building Number 827-A

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

Response

Description and Comments:

1. Is water flowing from the Christy box?
2. Are there any signs of recent overflow (damp dirt around Christy box)?

Yes/No

Yes/No

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

3. Is there standing water in the Christy box?

Yes/No

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).

Yes/No

If yes to any of the above, note date, actions taken, and type of repairs when made:

Supervisor's Signature

[Signature]

Date 12-6-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12-6-12 Inspector D. Lawson Building Number 851

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

- |   | <u>Response</u> | <u>Description and Comments:</u> |
|---|-----------------|----------------------------------|
| 1. Is water flowing from the Christy box?                                 | Yes/ <u>No</u>  | _____                            |
| 2. Are there any signs of recent overflow (damp dirt around Christy box)? | Yes/ <u>No</u>  | _____                            |

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

- |  |                |       |
|--|----------------|-------|
| 3. Is there standing water in the Christy box? | Yes/ <u>No</u> | _____ |
|--|----------------|-------|

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

- |  |                |                         |
|--|----------------|-------------------------|
| 4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris). | Yes/ <u>No</u> | _____<br>_____<br>_____ |
|--|----------------|-------------------------|

If yes to any of the above, note date, actions taken, and type of repairs when made.

Supervisor's Signature

[Signature]

Date 12-6-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Cooling Tower Percolation Pit Inspection Checklist\***  
**For Buildings 801, 809, 817A, 826, 827A, and 851**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 1-15-13 Inspector D. Hansen Building Number 801

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), EPD.

Check Items

- |   | <u>Response</u> | <u>Description and Comments:</u> |
|---|-----------------|----------------------------------|
| 1. Is water flowing from the Christy box?                                 | Yes/ <u>No</u>  | _____                            |
| 2. Are there any signs of recent overflow (damp dirt around Christy box)? | Yes/ <u>No</u>  | _____                            |

If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.

- |  |                |       |
|--|----------------|-------|
| 3. Is there standing water in the Christy box? | Yes/ <u>No</u> | _____ |
|--|----------------|-------|

If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted

- |  |                |                         |
|--|----------------|-------------------------|
| 4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris). | Yes/ <u>No</u> | _____<br>_____<br>_____ |
|--|----------------|-------------------------|

If yes to any of the above, note date, actions taken, and type of repairs when made:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Supervisor's Signature \_\_\_\_\_ Date \_\_\_\_\_

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



## **Appendix C**

### **Mechanical Room Network**

#### **Mechanical Equipment Discharge Effluent Monitoring for Buildings 806B and 827A, 827C, 827D, and 827E**

#### **Mechanical Equipment Room Percolation Pit Inspection Forms**

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table C-1. Site 300 mechanical equipment discharge effluent monitoring second semester/annual 2012 anions data summary.**

Well	Date	Sodium mg/L	Chloride mg/L	Nitrate (as NO <sub>3</sub> ) mg/L	Sulfate mg/L	Fluoride mg/L
3-B806B-OW	May 21	220	83	<0.5	170	0.37
3-B806B-OW	May 21 DUP	230	83	<0.5	170	0.38
3-B806B-OW	Oct 4	220	81	<0.5	170	0.27
3-B827A-OW	May 16	320	120	<0.5	250	0.35
3-B827A-OW	Oct 3	270	110	<0.5	220	0.43
3-B827A-OW	Oct 3 DUP	280	110	<0.5	220	0.42
3-B827C-OW	May 16	250	87	<0.5	180	0.28
3-B827C-OW	Oct 8	270	87	<0.5	180	0.34
3-B827D-OW <sup>a</sup>	May 15	460	180	1.0	360	0.42
3-B827E-OW	May 15	1,200	350	<2.5	990	2.1
3-B827E-OW	Oct 4	230	85	<0.5	180	0.31

<sup>a</sup> The B-827D facility was not sampled during the second semester 2012 due to a facility shutdown.

LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012

**Table C-2. Site 300 mechanical equipment discharge effluent monitoring second semester/annual 2012 metals data summary.**

Analyte ( $\mu\text{g/L}$ )	Date	3-B806B- OW	3-B806B- OW DUP	3-B827A- OW	3-B827A- OW DUP	3-B827C- OW	3-B827D- OW <sup>a</sup>	3-B827E- OW
Aluminum	May 15	–	–	–	–	–	60	140
	May 16	–	–	<50	–	<50	–	–
	May 21	130	120	–	–	–	–	–
	Oct 3	–	–	<50	<50	–	–	–
	Oct 4	<50	–	–	–	–	–	<50
	Oct 8	–	–	–	–	<50	–	–
Arsenic	May 15	–	–	–	–	–	<2	<2
	May 16	–	–	<2	–	<2	–	–
	May 21	<2	<2	–	–	–	–	–
	Oct 3	–	–	<2	<2	–	–	–
	Oct 4	<2	–	–	–	–	–	<2
	Oct 8	–	–	–	–	<2	–	–
Barium	May 15	–	–	–	–	–	<25	<25
	May 16	–	–	<25	–	<25	–	–
	May 21	<25	<25	–	–	–	–	–
	Oct 3	–	–	<25	<25	–	–	–
	Oct 4	<25	–	–	–	–	–	<25
	Oct 8	–	–	–	–	<25	–	–
Boron	May 15	–	–	–	–	–	2,000	4,100
	May 16	–	–	1,300	–	960	–	–
	May 21	910	960	–	–	–	–	–
	Oct 3	–	–	1,400	1,200	–	–	–
	Oct 4	900	–	–	–	–	–	540
	Oct 8	–	–	–	–	970	–	–
Cadmium	May 15	–	–	–	–	–	<50	<50
	May 16	–	–	<50	–	<50	–	–
	May 21	<50	<50	–	–	–	–	–
	Oct 3	–	–	<50	<50	–	–	–
	Oct 4	<50	–	–	–	–	–	<50
	Oct 8	–	–	–	–	<50	–	–
Calcium	May 15	–	–	–	–	–	1,500	5,700
	May 16	–	–	12,000	–	1,700	–	–
	May 21	7,500	7,800	–	–	–	–	–
	Oct 3	–	–	11,000	11,000	–	–	–
	Oct 4	7,500	–	–	–	–	–	8,400
	Oct 8	–	–	–	–	2,000	–	–
Chromium	May 15	–	–	–	–	–	<1	<1
	May 16	–	–	1.3	–	<1	–	–
	May 21	<1	<1	–	–	–	–	–
	Oct 3	–	–	<1	1.7	–	–	–
	Oct 4	<1	–	–	–	–	–	<1
	Oct 8	–	–	–	–	<1	–	–
Hexavalent Chromium	May 15	–	–	–	–	–	<1	<1
	May 16	–	–	<1	–	<1	–	–
	May 21	<1	<1	–	–	–	–	–
	Oct 3	–	–	<1	<1	–	–	–
	Oct 4	<1	–	–	–	–	–	<1
	Oct 8	–	–	–	–	<1	–	– (cont.)

LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012

**Table C-2. Site 300 mechanical equipment discharge effluent monitoring second semester/annual 2012 metals data summary.**

Analyte (µg/L)	Date	3-B806B- OW	3-B806B- OW DUP	3-B827A- OW	3-B827A- OW DUP	3-B827C- OW	3-B827D- OW <sup>a</sup>	3-B827E- OW
Copper	May 15	–	–	–	–	–	97	110
	May 16	–	–	5.2	–	33	–	–
	May 21	77	79	–	–	–	–	–
	Oct 3	–	–	5.5	5.0	–	–	–
	Oct 4	92	–	–	–	–	–	47
	Oct 8	–	–	–	–	26	–	–
Iron	May 15	–	–	–	–	–	1100	380
	May 16	–	–	190	–	710	–	–
	May 21	120	120	–	–	–	–	–
	Oct 3	–	–	<100	<100	–	–	–
	Oct 4	<100	–	–	–	–	–	<100
	Oct 8	–	–	–	–	870	–	–
Lead	May 15	–	–	–	–	–	<5	<5
	May 16	–	–	<5	–	<5	–	–
	May 21	<5	<5	–	–	–	–	–
	Oct 3	–	–	<5	<5	–	–	–
	Oct 4	<5	–	–	–	–	–	<5
	Oct 8	–	–	–	–	<5	–	–
Magnesium	May 15	–	–	–	–	–	<500	<500
	May 16	–	–	<500	–	<500	–	–
	May 21	<500	<500	–	–	–	–	–
	Oct 3	–	–	<500	<500	–	–	–
	Oct 4	<500	–	–	–	–	–	<500
	Oct 8	–	–	–	–	<500	–	–
Manganese	May 15	–	–	–	–	–	<30	<60
	May 16	–	–	<30	–	<30	–	–
	May 21	<30	<30	–	–	–	–	–
	Oct 3	–	–	<30	<30	–	–	–
	Oct 4	<30	–	–	–	–	–	<30
	Oct 8	–	–	–	–	<30	–	–
Mercury	May 15	–	–	–	–	–	<0.2	<0.2
	May 16	–	–	<0.2	–	<0.2	–	–
	May 21	<0.2	<0.2	–	–	–	–	–
	Oct 3	–	–	<0.2	<0.2	–	–	–
	Oct 4	<0.2	–	–	–	–	–	<0.2
	Oct 8	–	–	–	–	<0.2	–	–
Molybdenum	May 15	–	–	–	–	–	39	82
	May 16	–	–	28	–	<25	–	–
	May 21	<25	<25	–	–	–	–	–
	Oct 3	–	–	29	<25	–	–	–
	Oct 4	<25	–	–	–	–	–	<25
	Oct 8	–	–	–	–	<25	–	–
Nickel	May 15	–	–	–	–	–	<2	<4
	May 16	–	–	<2	–	<2	–	–
	May 21	<2	<2	–	–	–	–	–
	Oct 3	–	–	<2	<2	–	–	–
	Oct 4	<2	–	–	–	–	–	<2
	Oct 8	–	–	–	–	<2	–	– (cont.)

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table C-2. Site 300 mechanical equipment discharge effluent monitoring second semester/annual 2012 metals data summary.**

Analyte ( $\mu\text{g/L}$ )	Date	3-B806B- OW	3-B806B- OW DUP	3-B827A- OW	3-B827A- OW DUP	3-B827C- OW	3-B827D- OW <sup>a</sup>	3-B827E- OW
Potassium	May 15	–	–	–	–	–	21,000	210,000
	May 16	–	–	13,000	–	6,800	–	–
	May 21	8,100	8,500	–	–	–	–	–
	Oct 3	–	–	12,000	11,000	–	–	–
	Oct 4	8,300	–	–	–	–	–	7,000
	Oct 8	–	–	–	–	8,600	–	–
Selenium	May 15	–	–	–	–	–	<2	<2
	May 16	–	–	<2	–	<2	–	–
	May 21	<2	<2	–	–	–	–	–
	Oct 3	–	–	<2	<2	–	–	–
	Oct 4	<2	–	–	–	–	–	<2
	Oct 8	–	–	–	–	<2	–	–
Silver	May 15	–	–	–	–	–	<10	<20
	May 16	–	–	<10	–	<10	–	–
	May 21	<10	<10	–	–	–	–	–
	Oct 3	–	–	<10	<10	–	–	–
	Oct 4	<10	–	–	–	–	–	<10
	Oct 8	–	–	–	–	<10	–	–
Vanadium	May 15	–	–	–	–	–	<20	<20
	May 16	–	–	<20	–	<20	–	–
	May 21	<20	<20	–	–	–	–	–
	Oct 3	–	–	<20	<20	–	–	–
	Oct 4	<20	–	–	–	–	–	<20
	Oct 8	–	–	–	–	<20	–	–
Zinc	May 15	–	–	–	–	–	28	39
	May 16	–	–	24	–	<20	–	–
	May 21	<20	<20	–	–	–	–	–
	Oct 3	–	–	39	31	–	–	–
	Oct 4	22	–	–	–	–	–	25
	Oct 8	–	–	–	–	21	–	–

Note:

– = Sampling not required, sampling was performed for that analyte on a different date.

<sup>a</sup> The B-827D facility was not sampled during the second semester 2012 due to a facility shutdown.

*LLNL Site 300 Compliance Monitoring Report for WDR Order No. R5-2008-0148  
Second Semester/Annual Report 2012*

**Table C-3. Site 300 mechanical equipment discharge effluent monitoring second semester/annual 2012 physical data.**

<b>Well</b>	<b>Date</b>	<b>pH (Units)</b>	<b>Specific Conductance (<math>\mu</math>mhos/cm)</b>	<b>Total Alkalinity (as CaCO<sub>3</sub>) (mg/L)</b>	<b>Total dissolved solids (TDS) (mg/L)</b>	<b>Total Hardness (as CaCO<sub>3</sub>) (mg/L)</b>	<b>Total Phosphorus (as PO<sub>4</sub>) (mg/L)</b>
3-B806B-OW	May 21	8.5	1,050	200	700	20	<0.15
3-B806B-OW	May 21 DUP	8.5	1,050	200	720	21	<0.15
3-B806B-OW	Oct 4	8.5	980	210	720	20	<0.15
3-B827A-OW	May 16	9.2	1,510	320	1,000	32	0.57
3-B827A-OW	Oct 3	8.8	1,260	270	920	28	0.24
3-B827A-OW	Oct 3 DUP	8.8	1,290	270	940	28	0.25
3-B827C-OW	May 16	9.0	1,150	240	820	4.7	0.87
3-B827C-OW	Oct 8	8.9	1,120	240	800	5.4	0.74
3-B827D-OW <sup>a</sup>	May 15	10.3	2,170	400	1,400	4.2	1.1
3-B827E-OW	May 15	11.1	5,260	1,100	3,900	14	140
3-B827E-OW	Oct 4	8.7	1,040	230	760	22	0.20

<sup>a</sup> The B-827D facility was not sampled during the second semester 2012 due to a facility shutdown.

# FIELD TRACKING FORM

Semi-Annual Site 300 Mechanical Equipment Room/Percolation Pit Discharge

Special Instructions: Should be sampled in early April and October.

See back of form for additional access information

\*\* For 3-B827A-01-OW Contact FPOC; Off-road travel

LAB	CoC#	Ship It #
BC Labs	58118	160506

pH meter calibrated on: 10/13

Specific Conductance meter calibrated on: 10/13

Sample Date: 10/13/12

Field Meas		BC Labs				Comments			
Location Identifier	Sample Time	Initials	pH	Specific Conductance	S3METALS 500mL Poly	S3ANIONS 1 x 500ml Poly	S3WETCHEM 1000mL Poly	E245.2 (Mercury) 500mL Poly acidify HNO3 Post	
3-B827A-01-OW**	1400	145	8.42	1160.45	1	1	1	1	827A - 70, 150ml Samples collected over a 6 hour time frame. Approx 7 Liters collected
3-B827C-01-OW									
3-B827D-01-OW									
3-B827E-01-OW									
3-B806B-01-OW									
Duplicate of 3-B827A-01-OW									
3-B9900-OW	827A 1400	145			1	1	1	1	

☒ Copy to Analyst, Rick Blake.

Revised 9/10/12



### Additional instructions:

**Analytical Lab : BCLABS-BAK**

TAT:20d

Analytical Lab Log #:

**Project/Network: MECHEQUIPMNTRMS**

**ULNL Acct #: 3297-47**

**Release #: UNICARD**

Fax/Email #2:

Access/COC #: 58118

Document Control #: 58118

**Requiescat in I NI Analyst: B Blake**

Requester/Client Analysis: N. Blake  
Organization / Sampler: EPD / brinckhorst2

PCI Project #: 35166

PCI Task #. 1 03 02 06 02 08

FCI Task #: 1.00.VZ.00:02:00  
Fax/Email #1: swanson15@lln.gov

**Ray/Elliott #1: SWANSON**

**DMT Additional Copies:**

**EPD: EMAD/PRAD/ESPD**

**Lawrence Livermore National Laboratory  
P.O. Box 808 L-629  
Livermore, CA 94551**

**Work Authorized By: EPD**

**TRR Approver: RUDY JIMENEZ**

### Project Info:

[illegible]

Relinquished Signature	Company	Date	Time	Received Signature	Company	Date	Time
1 <i>[Signature]</i>	LLNL/EPD	10/3/2012	1530	2			
2				3			
3				4			
4				5			

Revision Printed: 10/13/2011 11/16/10

Signature Order - 1: Sampler, 2: Courier, 3: Lab, 4: Analyst, 5: DMT



## FIELD TRACKING FORM

Semi-Annual Site 300 Mechanical Equipment Room/Percolation Pit Discharge

Special Instructions: Should be sampled in early April and October.

See back of form for additional access information

\*\* For 3-B827A-01-OW Contact FPOC; Off-road travel

LAB	CoC#	Ship It #
BC Labs	58136	166549

pH meter calibrated on: 10/4Specific Conductance meter calibrated on: 10/4Sample Date: 10/4/12

Location Identifier		Field Meas		BC Labs				Comments	
	Sample Time	Initials	pH	Specific Conductance	S3METALS 500mL Poly	S3ANIONS 1 x 500ml Poly	S3WETCHEM 1000mL Poly	E245.2 (Mercury) 500mL Poly acidify HNO3 Post	
3-B827A-01-OW**									806B- 76, 150 ml Composite Sample collected over a 6 hour time frame. Approx 8 Liters collected
3-B827C-01-OW									
3-B827D-01-OW									
3-B827E-01-OW	1410	KS	8.22	99045	1	1	1	1	
3-B806B-01-OW	1345	KS	8.31	92845	1	1	1	1	
									827E- 76, 150 ml Composite Sample collected over a 6 hour time frame. Approx. 8 Liters collected
Duplicate of 3-B827C-01-OW									
3-B9900-OW									

☒ Copy to Analyst, Rick Blake.

Revised 9/10/12

**EPD: EMAD/PRAD/ESPD**  
**Lawrence Livermore National Laboratory**  
**P.O. Box 808 L-629**  
**Livermore, CA 94551**

**Additional Instructions:**

**Project Info:**

DMT Additional Copies:

**Fax/Email #2:**

Project Info:

[illegible]

	Refinquisitioned Signature	Company	Date	Time	Received Signature	Company	Date	Time
1	<i>[Signature]</i>	LLNL/EPD	10/4/2012	1530				
2								
3								
4								



## FIELD TRACKING FORM

Semi-Annual Site 300 Mechanical Equipment Room/Percolation Pit Discharge

Special Instructions: Should be sampled in early April and October.

See back of form for additional access information

\*\* For 3-B827A-01-OW Contact FPOC; Off-road travel

LAB	CoC#	Ship It #
BC Labs	58154	

pH meter calibrated on: 10/18

Specific Conductance meter calibrated on: 10/18

Sample Date: 10/18/12

Location Identifier			Field Meas		BC Labs				Comments	
	Sample Time	Initials								
3-B827A-01-OW**				pH	Specific Conductance	S3METALS 500mL Poly	S3ANIONS 1 x 500ml Poly	S3WETCHEM 1000mL Poly	E245.2 (Mercury) 500mL Poly Post acidify HNO3	827C - 80, 150ml Composite Sample Collected over a 6 1/2 hour time frame Approx. 8 L.w.s Collected  827D was NOT Sampled this over. operations were shut down in June 2013 And to DATE HAVE NOT BEEN Re-STARTED.
3-B827C-01-OW	1405	KJS	104245	8.46		1	1	1	1	
3-B827D-01-OW										
3-B827E-01-OW										
3-B806B-01-OW										
Duplicate of 3-B827C-01-OW										
3-B9900-OW										

☒ Copy to Analyst, Rick Blake.

Revised 9/10/12



**EPD: EMAD/PRAD/ESPD**  
**Lawrence Livermore National Laboratory**  
**P.O. Box 808 L-629**  
**Livermore, CA 94551**

**Document Control #: 58154**

**Requester/LLNL Analyst: R. Blake**

**Organization / Sampler:** EPD / brunckhorst2

**PCI Project #: 35166**

PCI Task #: 1.03.02.06.02.08

**Fax/Email #1: [swanson15@llnl.gov](mailto:swanson15@llnl.gov)**

**DMT Additional Copies:**

TAT:20d

Analytical Lab Log #:

**Project/Network:** MECHEQUIPMNTRMS

**LLNL Acct #: 3297-47**

**Release #: UNICARD**

**Fax/Email #2:**


**Additional Instructions:**

Work Authorized By: EPD

**TRR Approver: RUDY JIMENEZ**

### Project Info:

[illegible]

	Relinquished Signature	Company	Date	Time	Received Signature	Company	Date	Time
1		LLNL/EPD	10/8/2012	1520	2			
2					3			
3					4			
4					5			

Weekly

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7/2/12 Inspector Nicole Grimsley Building Number 827A-OT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	
If yes to any of the above, note date, actions taken, and type of repairs when made.		

Supervisor's Signature

Peter J. Palka

Date

7.3.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7/30/2012 Inspector MARK KRALLAS Building Number 806B

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>(No)</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>(No)</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>(No)</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>(No)</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

[Signature]

Date

7/31/12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**


Date 7/30/12 Inspector Nicole Grimsley Building Number 827A-CT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature  Date 7-30-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

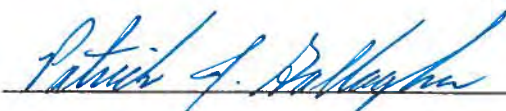
Date 7/30/12 Inspector Nicole Grimsley Building Number 827C

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature  Date 7-30-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7/30/12 Inspector Nicole Grimsley Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

*Patrick J. Dalrymple*

Date

7-30-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 7/30/12 Inspector Nicole Grimsley Building Number 827E

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature *Patricia J. DeMayhew* Date 7-30-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-28-12 Inspector Patrick J. Gallagher Building Number 827A-CT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

Patrick J. Gallagher

Date

8-28-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8.28.12 Inspector Patrick J. Gallagher Building Number 827C

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____		
_____		

Supervisor's Signature

Patrick J. Gallagher

Date

8.28.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-28-12 Inspector Patrick J. Gallagher Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature Patrick J. Gallagher Date 8-28-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 8-28-12 Inspector Patrick J. Gallagher Building Number 827E

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature Patrick J. Gallagher Date 8-28-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9/11/2012 Inspector MARK KRAUTH Building Number 806B

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature

Robert Babin

Date

9/11/12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9.20.12 Inspector Patrick J. Gallagher Building Number 827A-CT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

Patrick J. Gallagher

Date

9.20.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9.20.12 Inspector Patrick J. Gallagher Building Number 827C

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

Patrick J. Gallagher

Date

9.20.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9.20.12 Inspector Patrick J. Gallagher Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____		
_____		

Supervisor's Signature Patrick J. Gallagher Date 9.20.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9.20.12 Inspector Patrick J. Gallagher Building Number 827E

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____
		_____

Supervisor's Signature

Patrick J. Gallagher

Date

9.20.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 9/27/2012 Inspector MARK KRAVUS Building Number 806B

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature Robert Boster Date 9/27/12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

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**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10/29/12 Inspector Nicole Grimsley Building Number 827A-CT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

Check Items	Response	Description and Comments:
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No	
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No	
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No	
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No	
If yes to any of the above, note date, actions taken, and type of repairs when made.		

Supervisor's Signature

Patrick F. Gallagher

Date

10.29.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10/29/12 Inspector Nicole Grimsley Building Number 827C

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

*Patrick J. Doherty*

Date

10.29.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10/29/12 Inspector Nicole Grimsley Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

*Patrick J. Gallagher*

Date

10.29.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 10/29/12 Inspector Nicole Grimsley Building Number 827E

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature  Date 10.29.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date NOV 1 2012 Inspector MARK KRAUHS Building Number 806B

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/No <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/No <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/No <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/No <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

Robert Bates

Date

11/1/12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11/26/12 Inspector Nicole Grimsley Building Number 827A-CT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes/ <u>No</u>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes/ <u>No</u>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes/ <u>No</u>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes/ <u>No</u>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature *Patricia J. Gallagher* Date 11.26.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11/26/12 Inspector Nicole Grimsley Building Number 827C

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature Patrick J. Gallagher Date 11-26-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11/26/12 Inspector Nicole Grimsley Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		<u>~ 12 inches</u>
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		_____ _____ _____

Supervisor's Signature Patrick J. McLaughlin Date 11.26.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11/26/12 Inspector Nicole Grimsley Building Number 827E

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature  Date 11-26-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 11/28/2012 Inspector MARK KRAUS Building Number B806

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature Robert Bortner Date 11/28/12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12/17/12 Inspector Nicole Grimsley Building Number 827A-CT

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature *Patricia J. Hallagher* Date 12.17.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12/17/12 Inspector Nicole Frimsley Building Number 827C

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature *Patrick J. Gallagher* Date 12-17-12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12/17/12 Inspector Nicole Grimsley Building Number 827 D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	<u>About 3 inches of water</u> <u>covering entire gravel pit</u>
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature

Patricia A. Kellyman

Date

12.17.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12/17/12 Inspector Nicole Grimsley Building Number 827E

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input type="radio"/> No <input checked="" type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
		_____ _____ _____

Supervisor's Signature Patrick A. Gallagher Date 12/17/12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Weekly

file

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12/10/12 Inspector Nicole Grimsley Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	<input checked="" type="radio"/> Yes <input type="radio"/> No	<u>~ 6 inches</u>
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		
_____ _____ _____		

Supervisor's Signature

*Patricia A. Grimsley*

Date

12.10.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.

Weekly

**Monthly/Weekly Mechanical Equipment Percolation Pit Inspection Checklist\***  
**For Buildings 827A, 827C, 827D, 827E and 806A**  
**Waste Discharge Requirements Order Number R5-2008-0148**  
**Monitoring and Reporting Program Order No. R5-2008-0148, Revision 1**

Date 12/3/12 Inspector Nicole Grimsley Building Number 827D

Instructions: Circle the appropriate response for each item below, and record the date and time. Provide descriptions and comments if necessary. Attach additional paper if extra space is needed.

This record is to be maintained by the Inspecting Organization for a minimum of 5 years and made available by request of EPD or regulatory personnel.

Send a completed copy to the attention of Allen Grayson, WAMA (L-627), Environmental Functional Area.

<u>Check Items</u>	<u>Response</u>	<u>Description and Comments:</u>
1. Is water flowing from the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
2. Are there any signs of recent overflow (damp dirt around Christy box)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated to either 1 or 2, contact the ES&H Team EA or off hours contact the EDO (pager 04097 or 27595) immediately to arrange for reporting to the regulatory agency and sample collection.		
3. Is there standing water in the Christy box?	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____
If yes is indicated in 3, note depth and increase inspection frequency to weekly until no water is noted		<u>~ 6 inches</u>
4. Are there any other indications that the percolation pit requires maintenance (e.g., excessive build up scale, accumulation of dirt or debris).	Yes <input checked="" type="radio"/> No <input type="radio"/>	_____ _____ _____
If yes to any of the above, note date, actions taken, and type of repairs when made.		_____ _____ _____

Supervisor's Signature

*Patricia A. McLaughlin*

Date

12.3.12

\* Note: This form may be modified or used as is for documenting the routine inspections of the percolation pits permitted under Monitoring and Reporting Program Order Number R5-2008-0148, Revision 1. If standing water is observed in the monthly inspection, increase inspection frequency to weekly until no standing water is observed.



**Environmental Functional Area, Lawrence Livermore National Laboratory**  
**P.O. Box 808, L-627, Livermore, California 94551**